



Dummy Components Catalog Draft

**THE
DUMMY
CATALOGUE For
THOSE WHO....**

- * NEED PARTS**
- * NEED FAST
DEPENDABLE
SERVICE
AND WANT TO SAVE**














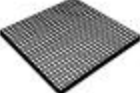
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113 N. First Ave., Upland, CA, USA
Phone: 1-909-949-4215 Fax: 1-909-985-8229

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Table of Contents


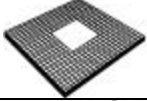







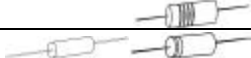



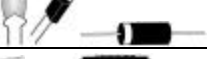



Picture	Part Number	Title	SECTION
		Cover	1
		Table of Contents	2
		Surface Mount Devices	3
	QFP	3.1 Diagrams and Part Number System.	3.1
	QFP	QUAD Flat Packs (>1.4mm Thick)	3.1.1
	TQFP	Thin Quad Flat Packs (<=1.4mm Thick)	3.1.2
	LQFP	Low Quad Flat Packs (<=1.0mm Thick)	3.1.3
	BQFP	Bumpered Quad Flat Packs	3.1.4
	SO	Small Outline Package	3.2
	SOIC	Small Outline Integrated Circuit (< 0.3in /7.5mm Wide)	3.2.1
	SOLIC	Small Outline Large Integrated Circuit (=> 0.300in/7.5mm Wide)	3.2.2
	SSOP	Shrink Small Outline Package	3.2.3
	TSOP-T1	Thin Small Outline Package-Type 1- (Height <= 1.0mm)	3.2.4
	TSOP-T2	Thin Small Outline Package-Type 2 (Height <= 1.0mm)	3.2.5
	TSSOP	Thin Shrink Small Outline Package (Height <= 1.0mm)	3.2.6
	TSSOP-EXP	Thin Shrink Small Outline Package with Exposed Pad (Height <= 1.0mm)	3.2.7
	VSOP	Very Small Outline Package	3.2.8
		J Lead Packages	3.4
	PLCC	Plastic Leaded Chip Carrier	3.4.1
	SOJ	Small Outline J Lead	3.4.2
	BGA	Ball Grid Array	3.5

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Table of Contents

Picture	Part Number	Title	SECTION
	uBGA-mBGA	Micro Ball Grid Array (µBGA-mBGA)	3.5.1
	PBGA	Plastic Ball Grid Array	3.5.3
	CABGA	Chip Scale/Array BGA (CSBGA), fleXBGA, Tape Array Ball Grid Array (TABGA)	3.5.11
	SOT	Small Outline Transistors	3.6
	SOD	Small Outline Diodes (SOD, MELF)	3.7
		Surface Mount Capacitors	3.8
	SMCC	Surface Mount Ceramic Chip Capacitors	3.8.1
		Surface Mount Resistors and Resistor Arrays	3.9
	CR	Surface Mount Chip Resistors	3.9.1
	SMCRA	Surface Mount Chip Resistor Arrays	3.9.3
	FP	Flat Packs	3.13
		Through Hole Devices	4
	DIP	Dual Inline Packages	4.1
	AR	Axial Resistors	4.2
	AC	Axial Capacitors	4.3
	RC	Radial Capacitor	4.4
	TO	Transistor Packages (Through Hole)	4.5
	DO	Diode Packages (Through Hole)	4.6
	AI	Axial Inductors	4.7
	LED	Light Emitting Diodes (Through Hole)	4.8
	SIP	Single Inline Packages	4.9

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Table of Contents

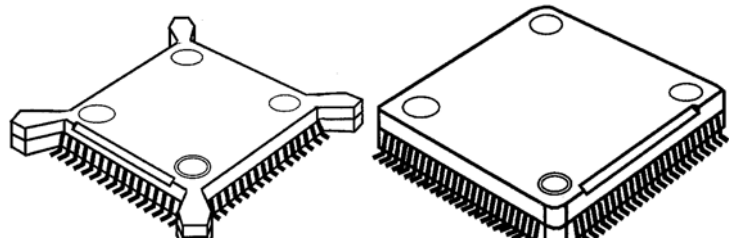
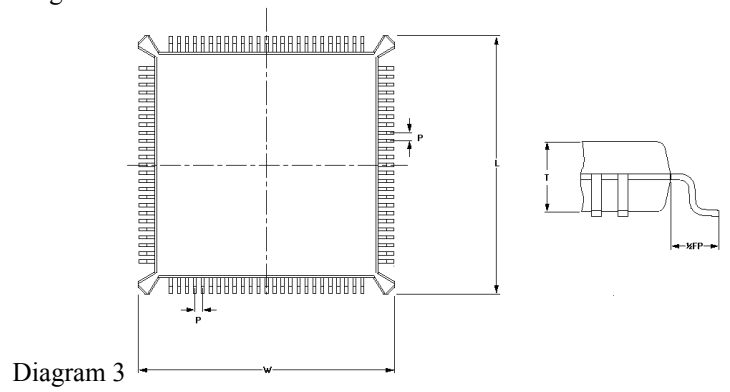
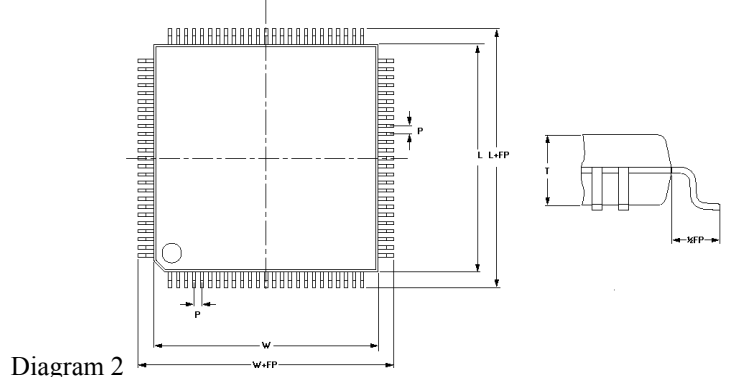
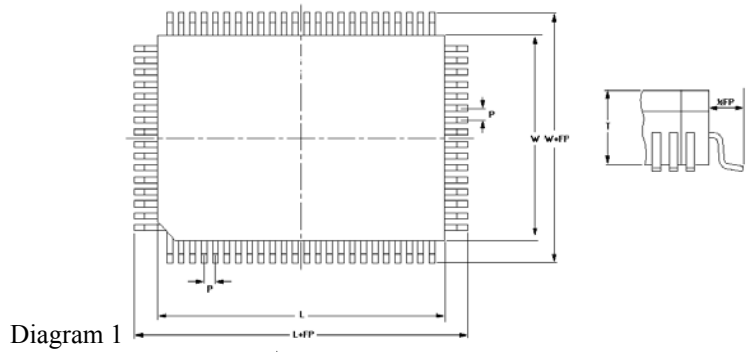
Picture	Part Number	Title	SECTION
		Accessories	5
	Packaging	Trays, Tape, Tubes etc.	5.3

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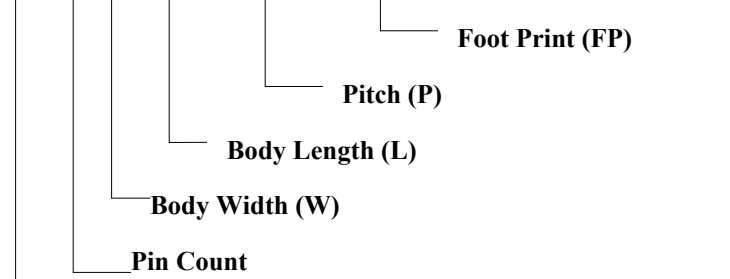
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Part Number Information:

LQFP100-14X20mm-0.65mm-2mm <-TR> Tape and Reel



Package Style:

TQFP-Thin Quad Flat Pack
1.0mm Max Thick Body

LQFP-Low Quad Flat Pack
1.4mm Max Thick Body-
Former designation was LQFP
before 1.0mm Thick body was
introduced

QFP-Quad Flat Pack
Greater than 1.4mm Thick
Body

BQFP-Bumpered Quad Flat Pack
See Diagram 3

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3.1.1 QFP																		
Part Number	Diagram	Leads	Length (L)		Width (W)		Foot Print (FP)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty per Tray	Qty Per Reel
			in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
QFP48-7X7mm-0.5mm-2mm	2	48	0.276	7.000	0.276	7.000	0.079	2.000	0.020	0.500	-		-		-		250	
QFP48-7X7mm-0.5mm-2.2mm	2	48	0.276	7.000	0.276	7.000	0.087	2.200	0.020	0.500	0.098	2.500	-		-		250	
QFP44-10X10mm-0.8mm-2.6mm	2	44	0.394	10.000	0.394	10.000	0.102	2.600	0.031	0.800	0.069	1.750	-		-		50	
QFP44-10X10mm-0.8mm-3.2mm	2	44	0.394	10.000	0.394	10.000	0.126	3.200	0.031	0.800	> .055	> 1.4	0.94	24.0	0.630/0.945	16/24	96	500
QFP44-10X10mm-0.8mm-3.9mm	2	44	0.394	10.000	0.394	10.000	0.154	3.900	0.031	0.800	> .055	> 1.4	0.94	24.0	0.630/0.945	16/24	96	500
QFP44-10X10mm-0.8mm-4.2mm	2	44	0.394	10.000	0.394	10.000	0.165	4.200	0.031	0.800	> .055	> 1.4	-		-		50	
QFP52-10X10mm-0.65mm-3.2mm	2	52	0.394	10.000	0.394	10.000	0.126	3.200	0.026	0.650	> .055	> 1.4	0.94	24.0	0.630/0.945	16/24	96	500
QFP52-10X10mm-0.65mm-3.9mm	2	52	0.394	10.000	0.394	10.000	0.154	3.900	0.026	0.650	> .055	> 1.4	0.94	24.0	0.630/0.945	16/24	96	500
QFP56-10X10mm-0.5mm-2.8mm	2	56	0.394	10.000	0.394	10.000	0.110	2.800	0.020	0.500	> .055	> 1.4	0.94	24.0	0.630/0.945	16/24	120	
QFP64-10X10mm-0.5mm-3.2mm	2	64	0.394	10.000	0.394	10.000	0.126	3.200	0.020	0.500	> .055	> 1.4	0.94	24.0	0.630/0.945	16/24	96	500
QFP64-10X10mm-0.5mm-3.9mm	2	64	0.394	10.000	0.394	10.000	0.154	3.900	0.020	0.500	> .055	> 1.4	0.94	24.0	0.630/0.945	16/24	96	500
QFP44-12X12mm-0mm-5.2mm	2	44	0.472	12.000	0.472	12.000	0.205	5.200	-	-	> .055	> 1.4	-		-		40	
QFP48-12X12mm-0mm-5.2mm	2	48	0.472	12.000	0.472	12.000	0.205	5.200	-	-	> .055	> 1.4	-		-		40	
QFP44-14X14mm-1mm-3.2mm	2	44	0.551	14.000	0.551	14.000	0.126	3.200	0.039	1.000	> .055	> 1.4	1.26	32.0	0.945	24	84	350
QFP52-14X14mm-1mm-3.2mm	2	52	0.551	14.000	0.551	14.000	0.126	3.200	0.039	1.000	> .055	> 1.4	1.26	32.0	0.945	24	84	350
QFP52-14X14mm-1mm-3.6mm	2	52	0.551	14.000	0.551	14.000	0.142	3.600	0.039	1.000	0.106	2.700	-		-	-	60	
QFP52-14X14mm-1mm-3.9mm	2	52	0.551	14.000	0.551	14.000	0.154	3.900	0.039	1.000	> .055	> 1.4	1.26	32.0	0.945	24	84	350
QFP64-14X14mm-0.8mm-3.2mm	2	64	0.551	14.000	0.551	14.000	0.126	3.200	0.031	0.800	> .055	> 1.4	1.26	32.0	0.945	24	84	350
QFP64-14X14mm-0.8mm-2.4mm	2	64	0.551	14.000	0.551	14.000	0.094	2.400	0.031	0.800	> .055	> 1.4	-	-	-	-	50	-
QFP64-14X14mm-0.8mm-2.8mm	2	64	0.551	14.000	0.551	14.000	0.110	2.800	0.031	0.800	> .055	> 1.4	-	-	-	-	-	-
QFP64-14X14mm-0.8mm-3.2mm	2	64	0.551	14.000	0.551	14.000	0.126	3.200	0.031	0.800	> .055	> 1.4	1.26	32.0	0.945	24	84	350
QFP64-14X14mm-0.8mm-3.9mm	2	64	0.551	14.000	0.551	14.000	0.154	3.900	0.031	0.800	> .055	> 1.4	1.26	32.0	0.945	24	84	350

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- 1 - 3.1.1 QFP 1.doc Revision:13

3.1.1 QFP Cont.																		
Part Number	Diagram	Leads	Length (L)		Width (W)		Foot Print (FP)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty per Tray	Qty Per Reel
			in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
QFP80-14X14mm-0.65mm-3.2mm	2	80	0.551	14.000	0.551	14.000	0.126	3.200	0.026	0.650	> .055	> 1.4	1.26	32.0	0.945	24	84	35
QFP80-14X14mm-0.65mm-3.4mm	2	80	0.551	14.000	0.551	14.000	0.134	3.400	0.026	0.650	> .055	> 1.4	-	-	-	-	-	-
QFP80-14X14mm-0.65mm-3.9mm	2	80	0.551	14.000	0.551	14.000	0.154	3.900	0.026	0.650	> .055	> 1.4	1.26	32.0	0.945	24	84	35
QFP80-14X14mm-0.65mm-3.2mm	2	80	0.551	14.000	0.551	14.000	0.126	3.200	0.026	0.650	> .055	> 1.4	1.26	32.0	0.945	24	84	35
QFP100-14X14mm-0.5mm-0mm	2	100	0.551	14.000	0.551	14.000	-	-	0.020	0.500	> .055	> 1.4	-	-	-	-	90	-
QFP64-14X20mm-1mm-3.2mm	1	64	0.787	20.000	0.551	14.000	0.126	3.200	0.039	1.000	> .055	> 1.4	1.73	44.0	1.260	32	60	20
QFP64-14X20mm-1mm-3.9mm	1	64	0.787	20.000	0.551	14.000	0.154	3.900	0.039	1.000	> .055	> 1.4	1.73	44.0	1.260	32	66	20
QFP64-14X20mm-1mm-4.6mm	1	64	0.787	20.000	0.551	14.000	0.181	4.600	0.039	1.000	> .055	> 1.4	-	-	-	-	-	-
QFP64-14X20mm-1mm-5mm	1	64	0.787	20.000	0.551	14.000	0.197	5.000	0.039	1.000	> .055	> 1.4	-	-	-	-	50	-
QFP80-14X20mm-0.8mm-3.2mm	1	80	0.787	20.000	0.551	14.000	0.126	3.200	0.031	0.800	> .055	> 1.4	1.73	44.0	1.260	32	50/66	35
QFP80-14X20mm-0.8mm-3.6mm	1	80	0.787	20.000	0.551	14.000	0.142	3.600	0.031	0.800	> .055	> 1.4	-	-	-	-	66	50
QFP80-14X20mm-0.8mm-3.9mm	1	80	0.787	20.000	0.551	14.000	0.154	3.900	0.031	0.800	> .055	> 1.4	1.73	44.0	1.260	32	66	20
QFP80-14X20mm-0.8mm-5mm	1	80	0.787	20.000	0.551	14.000	0.197	5.000	0.031	0.800	> .055	> 1.4	-	-	-	-	-	-
QFP100-14X20mm-0.65mm-2.8mm	1	100	0.787	20.000	0.551	14.000	0.110	2.800	0.026	0.650	> .055	> 1.4	1.73	44.0	1.260	32	66	20
QFP100-14X20mm-0.65mm-3.2mm	1	100	0.787	20.000	0.551	14.000	0.126	3.200	0.026	0.650	> .055	> 1.4	1.73	44.0	1.260	32	66	20
QFP100-14X20mm-0.65mm-3.4mm	1	100	0.787	20.000	0.551	14.000	0.134	3.400	0.026	0.650	> .055	> 1.4	1.73	44.0	1.260	32	66	20
QFP100-14X20mm-0.65mm-3.5mm	1	100	0.787	20.000	0.551	14.000	0.138	3.500	0.026	0.650	> .055	> 1.4	1.73	44.0	1.260	32	66	20
QFP100-14X20mm-0.65mm-3.7mm	1	100	0.787	20.000	0.551	14.000	0.146	3.700	0.026	0.650	> .055	> 1.4	1.73	44.0	1.260	32	66	20
QFP100-14X20mm-0.65mm-3.9mm	1	100	0.787	20.000	0.551	14.000	0.154	3.900	0.026	0.650	> .055	> 1.4	1.73	44.0	1.260	32	66	20
QFP100-14X20mm-0.65mm-4.9mm	1	100	0.787	20.000	0.551	14.000	0.193	4.900	0.026	0.650	> .055	> 1.4	1.73	44.0	1.260	32	60	-

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- 1 - 3.1.1 QFP 2.doc Revision:12

3.1.1 QFP			Length (L)		Width (W)		Foot Print (FP)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty per Tray	Qty Per Reel
Part Number	Diagram	Leads	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
QFP100-14X20mm-0.65mm-5.2mm	1	100	0.787	20.000	0.551	14.000	0.205	5.200	0.026	0.650	> .055	> 1.4	1.73	44.0	1.260	32	60	
QFP100-14X20mm-0.65mm-5.5mm	1	100	0.787	20.000	0.551	14.000	0.217	5.500	0.026	0.650	> .055	> 1.4	1.73	44.0	1.260	32	60	
QFP100-14X20mm-0.65mm-5.6mm	1	100	0.787	20.000	0.551	14.000	0.220	5.600	0.026	0.650	> .055	> 1.4	1.73	44.0	1.260	32	60	
QFP128-14X20mm-0.5mm-3.2mm	1	128	0.787	20.000	0.551	14.000	0.126	3.200	0.020	0.500	> .055	> 1.4	1.73	44.0	1.260	32	66	
QFP128-14X20mm-0.5mm-3.9mm	1	128	0.787	20.000	0.551	14.000	0.154	3.900	0.020	0.500	> .055	> 1.4	1.73	44.0	1.260	32	66	
QFP100-22X22mm-0.8mm-5.7mm	2	100	0.866	22.000	0.866	22.000	0.224	5.700	0.031	0.800	0.142	3.600	-	-	-	-	24	200
QFP176-24X24mm-0.5mm-2.2mm	2	176	0.945	24.000	0.945	24.000	0.087	2.200	0.020	0.500	0.067	1.700	-	-	-	-		
QFP120-28X28mm-0.8mm-2.6mm	2	120	1.102	28.000	1.102	28.000	0.102	2.600	0.031	0.800	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP120-28X28mm-0.8mm-3.2mm	2	120	1.102	28.000	1.102	28.000	0.126	3.200	0.031	0.800	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP120-28X28mm-0.8mm-3.9mm	2	120	1.102	28.000	1.102	28.000	0.154	3.900	0.031	0.800	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP128-28X28mm-0.8mm-2.6mm	2	128	1.102	28.000	1.102	28.000	0.102	2.600	0.031	0.800	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP128-28X28mm-0.8mm-3.2mm	2	128	1.102	28.000	1.102	28.000	0.126	3.200	0.031	0.800	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP128-28X28mm-0.8mm-3.9mm	2	128	1.102	28.000	1.102	28.000	0.154	3.900	0.031	0.800	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP136-28X28mm-0.65mm-3.2mm	2	136	1.102	28.000	1.102	28.000	0.126	3.200	0.026	0.650	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP144-26X26mm-0.5mm-5mm	2	144	1.024	26.000	1.024	26.000	0.197	5.000	0.020	0.500	0.142	3.600	-	-	-	-	24	
QFP144-28X28mm-0.65mm-2.6mm	2	144	1.102	28.000	1.102	28.000	0.102	2.600	0.026	0.650	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP144-28X28mm-0.65mm-3.2mm	2	144	1.102	28.000	1.102	28.000	0.126	3.200	0.026	0.650	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP144-28X28mm-0.65mm-3.9mm	2	144	1.102	28.000	1.102	28.000	0.154	3.900	0.026	0.650	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP160-22X22mm-0.5mm-2.6mm	2	160	0.866	22.000	0.866	22.000	0.102	2.600	0.020	0.500	0.118	3.000	-	-	-	-		

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- 1 - 3.1.1 QFP 3.doc Revision:10

3.1.1 QFP																		
Part Number	Diagram	Leads	Length (L)		Width (W)		Foot Print (FP)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty per Tray	Qty Per Reel
			in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
QFP160-28X28mm-0.65mm-2.6mm	2	160	1.102	28.000	1.102	28.000	0.102	2.600	0.026	0.650	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP160-28X28mm-0.65mm-3.2mm	2	160	1.102	28.000	1.102	28.000	0.126	3.200	0.026	0.650	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP160-28X28mm-0.65mm-3.3mm	2	160	1.102	28.000	1.102	28.000	0.130	3.300	0.026	0.650	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP160-28X28mm-0.65mm-3.9mm	2	160	1.102	28.000	1.102	28.000	0.154	3.900	0.026	0.650	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP184-28X28mm-0.5mm-2.6mm	2	184	1.102	28.000	1.102	28.000	0.102	2.600	0.020	0.500	> .055	> 1.4	1.73	44.0	1.575	40	24	200
QFP208-28X28mm-0.5mm-2.6mm	2	208	1.102	28.000	1.102	28.000	0.102	2.600	0.020	0.500	> .055	> 1.4	1.73	44.0	1.575	40	24	
QFP208-28X28mm-0.5mm-3.2mm	2	208	1.102	28.000	1.102	28.000	0.126	3.200	0.020	0.500	> .055	> 1.4	1.73	44.0	1.575	40	24	
QFP256-28X28mm-0.4mm-2.6mm	2	256	1.102	28.000	1.102	28.000	0.102	2.600	0.016	0.400	> .055	> 1.4	1.73	44.0	1.575	40	24	
QFP184-32X32mm-0.65mm-4.5mm	2	184	1.260	32.000	1.260	32.000	0.177	4.500	0.026	0.650	> .055	> 1.4	-	-	-	-	14	
QFP240-32X32mm-0.5mm-2.6mm	2	240	1.260	32.000	1.260	32.000	0.102	2.600	0.020	0.500	> .055	> 1.4	-	-	-	-	14/24	
QFP304-40X40mm-0.5mm-2.6mm	2	304	1.575	40.000	1.575	40.000	0.102	2.600	0.020	0.500	> .055	> 1.4	-	-	-	-	12	

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- 1 - 3.1.1 QFP 4.doc Revision:7

3.1.2 TQFP			Length (L)		Width (W)		Foot Print (FP)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty per Tray	Qty Per Reel
Part Number	Diagr am	Leads	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
TQFP24-4X4mm-0.5mm-mm	2	24	0.157	4.000	0.157	4.000	-		0.020	0.500	0.039 max	1.0 max	-	-	-	-		
TQFP32-5X5mm-0.5mm-2mm	2	32	0.197	5.000	0.197	5.000	0.079	2.000	0.020	0.500	0.039 max	1.0 max	0.63	16.0	0.472	12	360	2,500
TQFP32-7X7mm-0.8mm-2mm	2	32	0.276	7.000	0.276	7.000	0.079	2.000	0.031	0.800	0.039 max	1.0 max	0.63	16.0	0.472	12	250	1,000
TQFP40-5X5mm-0.4mm-2mm	2	40	0.197	5.000	0.197	5.000	0.079	2.000	0.016	0.400	0.039 max	1.0 max	0.63	16.0	0.472	12	360	1,000
TQFP44-10X10mm-0.8mm-2mm	2	44	0.394	10.000	0.394	10.000	0.079	2.000	0.031	0.800	0.039 max	1.0 max	0.94	24.0	0.630	16	160	1,000
TQFP44-14X14mm-1mm-2mm	2	44	0.551	14.000	0.551	14.000	0.079	2.000	0.039	1.000	0.039 max	1.0 max	1.26	32.0	0.945	24	90	750
TQFP48-7X7mm-0.5mm-2mm	2	48	0.276	7.000	0.276	7.000	0.079	2.000	0.020	0.500	0.039 max	1.0 max	0.63	16.0	0.472	12	250	1,000
TQFP52-10X10mm-0.65mm-2mm	2	52	0.394	10.000	0.394	10.000	0.079	2.000	0.026	0.650	0.039 max	1.0 max	0.94	24.0	0.630	16	160	1,000
TQFP64-7X7mm-0.4mm-2mm	2	64	0.276	7.000	0.276	7.000	0.079	2.000	0.016	0.400	0.039 max	1.0 max	0.63	16.0	0.472	12	250	1,000
TQFP64-10X10mm-0.5mm-2mm	2	64	0.394	10.000	0.394	10.000	0.079	2.000	0.020	0.500	0.039 max	1.0 max	0.94	24.0	0.945	24	160	1,000
TQFP64-14X14mm-0.8mm-2mm	2	64	0.551	14.000	0.551	14.000	0.079	2.000	0.031	0.800	0.039 max	1.0 max	0.94	24.0	0.630	16	90	1,000
TQFP80-10X10mm-0.4mm-2mm	2	80	0.394	10.000	0.394	10.000	0.079	2.000	0.016	0.400	0.039 max	1.0 max	0.94	24.0	0.630	16	160	1,000
TQFP80-12X12mm-0.5mm-2mm	2	80	0.472	12.000	0.472	12.000	0.079	2.000	0.020	0.500	0.039 max	1.0 max	0.94	24.0	0.945	24	119	1,000
TQFP80-14X14mm-0.65mm-2mm	2	80	0.551	14.000	0.551	14.000	0.079	2.000	0.026	0.650	0.039 max	1.0 max	0.94	24.0	0.945	24	90	1,000
TQFP100-14X14mm-0.5mm-2mm	2	100	0.551	14.000	0.551	14.000	0.079	2.000	0.020	0.500	0.039 max	1.0 max	0.94	24.0	0.945	24	90	1,000
TQFP120-14X14mm-0.4mm-2mm	2	120	0.551	14.000	0.551	14.000	0.079	2.000	0.016	0.400	0.039 max	1.0 max	0.94	24.0	0.945	24	90	1,000
TQFP128-14X14mm-0.4mm-2mm	2	128	0.551	14.000	0.551	14.000	0.079	2.000	0.016	0.400	0.039 max	1.0 max	0.94	24.0	0.945	24	90	1,000
TQFP128-20X20mm-0.5mm-2mm	2	128	0.787	20.000	0.787	20.000	0.079	2.000	0.020	0.500	0.039 max	1.0 max	1.73	44.0	0.945	24	60	500
TQFP144-20X20mm-0.5mm-2mm	2	144	0.787	20.000	0.787	20.000	0.079	2.000	0.020	0.500	0.039 max	1.0 max	1.73	44.0	0.945	24	60	1,000
TQFP176-20X20mm-0.4mm-2mm	2	176	0.787	20.000	0.787	20.000	0.079	2.000	0.016	0.400	0.039 max	1.0 max	1.73	44.0	0.945	24	60	1,000
TQFP176-24X24mm-0.5mm-mm	2	176	0.945	24.000	0.945	24.000	-		0.020	0.500	0.039 max	1.0 max	-		-		40	

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- 1 - 3.1.2 TQFP 1.doc Revision:10

3.1.3 LQFP																			
Part Number	Diagr am	Leads	Length (L)		Width (W)		Foot Print (FP)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty per Tray	Qty Per Reel	
			in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm			
LQFP32-5X5mm-0.5mm-2mm	2	32	0.197	5.000	0.197	5.000	0.079	2.000	0.020	0.500	.055 max	1.4 max	0.63	16.0	0.472	12	360	2,500	
LQFP32-7X7mm-0.8mm-2mm	2	32	0.276	7.000	0.276	7.000	0.079	2.000	0.031	0.800	.055 max	1.4 max	0.63	16.0	0.472	12	250	1,000	
LQFP44-10X10mm-0.8mm-2mm	2	44	0.394	10.000	0.394	10.000	0.079	2.000	0.031	0.800	.055 max	1.4 max	0.94	24.0	0.630/0.945	16/24	160	1,000	
LQFP44-10X10mm-0.8mm-3.6mm	2	44	0.394	10.000	0.394	10.000	0.142	3.600	0.031	0.800	.055 max	1.4 max	-	-	-	-	90	-	
LQFP44-14X14mm-0.8mm-4.2mm	2	44	0.551	14.000	0.551	14.000	0.165	4.200	0.031	0.800	.055 max	1.4 max	-	-	-	-	52	-	
LQFP44-14X14mm-1mm-2mm	2	44	0.551	14.000	0.551	14.000	0.079	2.000	0.039	1.000	.055 max	1.4 max	1.26	32.0	0.945	24	90	750	
LQFP44-14X14mm-1mm-4mm	2	44	0.551	14.000	0.551	14.000	0.157	4.000	0.039	1.000	.055 max	1.4 max	-	-	-	-	-	-	
LQFP48-7X7mm-0.5mm-2mm	2	48	0.276	7.000	0.276	7.000	0.079	2.000	0.020	0.500	.055 max	1.4 max	0.63	16.0	0.472	12	250	1,000	
LQFP52-10X10mm-0.65mm-2mm	2	52	0.394	10.000	0.394	10.000	0.079	2.000	0.026	0.650	.055 max	1.4 max	0.94	24.0	0.630/0.945	16/24	160	1,000	
LQFP64-7X7mm-0.4mm-2mm	2	64	0.276	7.000	0.276	7.000	0.079	2.000	0.016	0.400	.055 max	1.4 max	0.63	16.0	0.472	12	250	1,000	
LQFP64-10X10mm-0.5mm-2mm	2	64	0.394	10.000	0.394	10.000	0.079	2.000	0.020	0.500	.055 max	1.4 max	0.94	24.0	0.630/0.945	16/24	160	1,000	
LQFP64-14X14mm-0.8mm-2mm	2	64	0.551	14.000	0.551	14.000	0.079	2.000	0.031	0.800	.055 max	1.4 max	0.94	24.0	0.787/0.945	20/24	90	1,000	
LQFP64-14X14mm-0.8mm-2.4mm	2	64	0.551	14.000	0.551	14.000	0.094	2.400	0.031	0.800	.055 max	1.4 max	-	-	-	-	50-90	-	
LQFP64-14X14mm-0.8mm-2.6mm	2	64	0.551	14.000	0.551	14.000	0.102	2.600	0.031	0.800	.055 max	1.4 max	-	-	-	-	50	-	
LQFP80-10X10mm-0.4mm-2mm	2	80	0.394	10.000	0.394	10.000	0.079	2.000	0.016	0.400	.055 max	1.4 max	0.94	24.0	0.630/0.945	16/24	160	1,000	
LQFP80-12X12mm-0.5mm-2mm	2	80	0.472	12.000	0.472	12.000	0.079	2.000	0.020	0.500	.055 max	1.4 max	0.94	24.0	0.630/0.945	16/24	119	1,000	
LQFP80-14X14mm-0.65mm-2mm	2	80	0.551	14.000	0.551	14.000	0.079	2.000	0.026	0.650	.055 max	1.4 max	0.94	24.0	0.787/0.945	20/24	90	1,000	
LQFP100-14X14mm-0.5mm-2mm	2	100	0.551	14.000	0.551	14.000	0.079	2.000	0.020	0.500	.055 max	1.4 max	0.94	24.0	0.787/0.945	20/24	90	1,000	
LQFP100-14X20mm-0.65mm-2mm	1	100	0.787	20.000	0.551	14.000	0.079	2.000	0.026	0.650	.055 max	1.4 max	1.73	44.0	0.945	24	72	1,000	

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3.1.3 LQFP			Length (L)		Width (W)		Foot Print (FP)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty	Qty
Part Number	Diagr am	Leads	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	per Tray	Per Reel
LQFP120-14X14mm-0.4mm-2mm	2	120	0.551	14.000	0.551	14.000	0.079	2.000	0.016	0.400	.055 max	1.4 max	0.94	24.0	0.787/0.945	20/24	90	1,000
LQFP128-14X14mm-0.4mm-2mm	2	128	0.551	14.000	0.551	14.000	0.079	2.000	0.016	0.400	.055 max	1.4 max	0.94	24.0	0.787/0.945	20/24	90	1,000
LQFP128-14X20mm-0.5mm-2mm	1	128	0.787	20.000	0.551	14.000	0.079	2.000	0.020	0.500	.055 max	1.4 max	1.73	44.0	0.945	24	72	1,000
LQFP128-20X20mm-0.5mm-2mm	1	128	0.787	20.000	0.787	20.000	0.079	2.000	0.020	0.500	.055 max	1.4 max	1.73	44.0	0.945	24	60	500
LQFP144-20X20mm-0.5mm-2mm	2	144	0.787	20.000	0.787	20.000	0.079	2.000	0.020	0.500	.055 max	1.4 max	1.73	44.0	0.945	24	60	1,000
LQFP160-24X24mm-0.5mm-2mm	2	160	0.945	24.000	0.945	24.000	0.079	2.000	0.020	0.500	.055 max	1.4 max	1.73	44.0	1.260	32	40	1,000
LQFP160-20X20mm-0.4mm-mm	2	160	0.787	20.000	0.787	20.000	-		0.016	0.400	.055 max	1.4 max	-		-			
LQFP160-28X28mm-0.65mm-2mm	2	160	1.102	28.000	1.102	28.000	0.079	2.000	0.026	0.650	.055 max	1.4 max	1.73	44.0	1.575	40	36	500
LQFP168-14X14mm-0.3mm-2mm	2	168	0.551	14.000	0.551	14.000	0.079	2.000	0.012	0.300	.055 max	1.4 max	0.94	24.0	0.033	1	90	1,000
LQFP176-20X20mm-0.4mm-2mm	2	176	0.787	20.000	0.787	20.000	0.079	2.000	0.016	0.400	.055 max	1.4 max	1.73	44.0	0.945	24	60	1,000
LQFP176-24X24mm-0.5mm-2mm	2	176	0.945	24.000	0.945	24.000	0.079	2.000	0.020	0.500	.055 max	1.4 max	1.73	44.0	1.260	32	40	500
LQFP208-28X28mm-0.5mm-2mm	2	208	1.102	28.000	1.102	28.000	0.079	2.000	0.020	0.500	.055 max	1.4 max	1.73	44.0	1.260	32	36	500
LQFP216-24X24mm-0.4mm-2mm	2	216	0.945	24.000	0.945	24.000	0.079	2.000	0.016	0.400	.055 max	1.4 max	1.73	44.0	1.260	32	40	500
LQFP256-28X28mm-0.4mm-2mm	2	256	1.102	28.000	1.102	28.000	0.079	2.000	0.016	0.400	.055 max	1.4 max	1.73	44.0	1.260	32	36	500

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3.1.4 BQFP			Length (L)		Width (W)		Foot Print (FP)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty	Qty
Part Number	Diagram	Leads	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	per Tray	Per Reel
BQFP84-20X20mm-0.636mm-0mm	3	84	0.787	20.000	0.787	20.000	-	-	0.025	0.636	0.142	3.600	-	-	-	-	60	
BQFP100-22.6X22.6mm-0.636mm-3.3mm	3	100	0.890	22.600	0.890	22.600	0.130	3.300	0.025	0.636	-	-	-	-	-	-	55	300
BQFP132-27.7X27.7mm-0.636mm-3.3mm	3	132	1.091	27.700	1.091	27.700	0.130	3.300	0.025	0.636	-	-	-	-	-	-	36	300

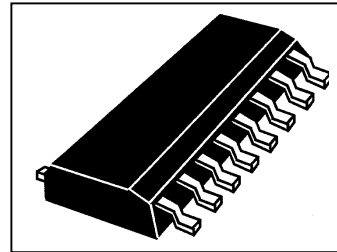
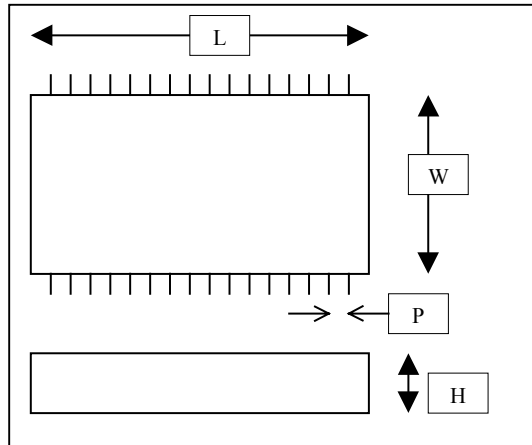
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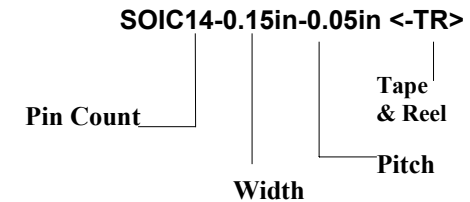
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- 1 - 3.1.4 BQFP 2.doc Revision:7



3.2.1 SOIC Small Outline Integrated Circuit

Part Number Information:



3.2.1 SOIC		Length (L)		Width (W)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty per Tube	Qty Per Reel	Notes
Part Number	Leads	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm			
SOIC4-0.138in-0.091in	4	0.256	6.50	0.138	3.50	0.091	2.300	0.063	1.6	0.472	12.000	0.315	8	-	-	1
SOIC4-0.15in-0.05in	4	-	-	0.150	3.90	0.050	1.270	-	-	0.472	12.000	0.315	8	-	-	
SOIC5-0.063in-0.037in	5	0.114	2.90	0.063	1.60	0.037	0.950	0.043	1.1	-	-	-	-	-	-	2
SOIC8-0.15in-0.05in	8	0.20	4.90	0.150	3.90	0.050	1.270	0.058	1.5	0.4704	12.000	0.315	8	100	2,500	
SOIC8-0.3in-0.05in	8	0.30	7.55	0.300	7.50	0.050	1.270	0.093	2.4	0.630	16.000	0.472	12	64	1,000	
SOIC14-0.15in-0.05in	14	0.341	8.65	0.150	3.90	0.050	1.270	0.058	1.5	0.6272	16.000	0.3136	8	57	2,500	
SOIC14-0.209in-0.05in	14	0.40	10.10	0.209	5.30	0.050	1.270	0.075	1.9	0.630	16.000	0.472	12	45	2,000	
SOIC16-0.15in-0.05in	16	0.39	9.90	0.150	3.90	0.050	1.270	0.055	1.4	0.6272	16.000	0.3136	8	50	2,500	
SOIC16-0.209in-0.05in	16	0.40	10.10	0.209	5.30	0.050	1.270	0.075	1.9	0.630	16.000	0.472	12	43	2,000	
SOIC20-0.209in-0.05in	20	0.50	12.60	0.209	5.30	0.050	1.270	0.075	1.9	-	-	-	-	-	-	
SOIC24-0.209in-0.05in	24	0.600	15.24	0.209	5.30	0.050	1.270	0.089	2.3	-	-	-	-	-	-	

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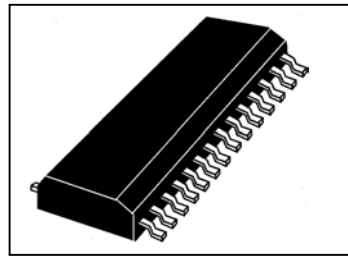
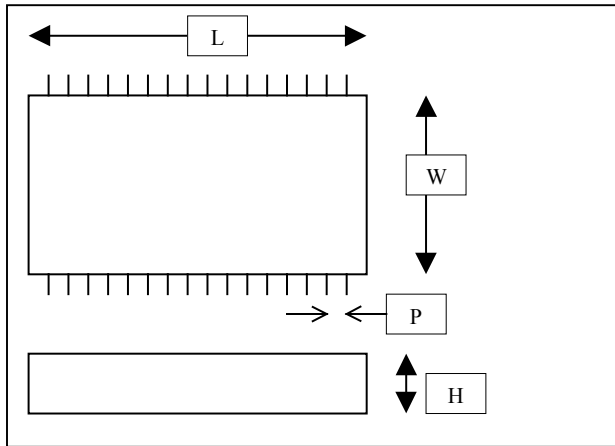
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- 1 -Section 3.2.1 3.2.1 Ver b.doc Revision:49

3.2.2 SOLIC

Small Outline Large Integrated Circuit



Part Number Information:

SOLIC24-0.3in-0.05in <-TR>

Pin Count

Pitch

Tape & Reel

Width

3.2.2 SOLIC		Length (L)		Width (W)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty per Tube	Qty Per Reel	Notes
Part Number	Leads	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm			
SOLIC14-0.3in-0.05in	14	-	-	0.300	7.50	0.050	1.270	-	-	-	-	-	-	-	-	-
SOLIC16-0.3in-0.05in	16	0.41	10.300	0.300	7.50	0.050	1.270	0.093	2.4	0.630	16.000	0.472	12	48	1,000	
SOLIC18-0.3in-0.05in	18	0.456	11.582	0.300	7.50	0.050	1.270	-	-	0.945	24.000	0.472	12	41-42	1,000	
SOLIC20-0.3in-0.05in	20	0.50	12.80	0.300	7.50	0.050	1.270	0.093	2.4	0.945	24.000	0.472	12	38	2,000	
SOLIC20-0.567in-0.02in	20	-	-	0.567	14.40	0.020	0.500	-	-	-	-	-	-	-	-	-
SOLIC24-0.3in-0.05in	24	0.61	15.40	0.300	7.50	0.050	1.270	0.093	2.4	0.945	24.000	0.472	12	30	1,000	
SOLIC24-0.567in-0.02in	24	-	-	0.567	14.40	0.020	0.500	-	-	-	-	-	-	-	-	-
SOLIC28-0.3in-0.05in	28	0.70	17.90	0.300	7.50	0.050	1.270	0.093	2.4	0.945	24.000	0.472	12	27	1,000	
SOLIC28-0.33in-0.05in	28	-	-	0.330	8.38	0.050	1.270	-	-	0.945	24.000	0.630	16	26-27	1,000	
SOLIC28-0.35in-0.05in	28	0.818	20.777	0.350	8.89	0.050	1.270	-	-	-	-	-	-	26	500	
SOLIC28-0.4in-0.05in	28	0.726	18.440	0.400	10.16	0.050	1.270	-	-	-	-	-	-	26	500	
SOLIC28-0.724in-0.02in	28	-	-	0.724	18.40	0.020	0.500	-	-	-	-	-	-	-	-	-
SOLIC32-0.3in-0.05in	32	0.81	20.40	0.300	7.50	0.050	1.270	0.093	2.4	1.260	32.000	0.630	16	22-25	1,000	
SOLIC32-0.33in-0.05in	32	0.818	20.777	0.330	8.38	0.050	1.270	-	-	1.260	32.000	0.630 / 0.866	16/22	99	750/1,000	
SOLIC32-0.35in-0.05in	32	0.818	20.777	0.350	8.89	0.050	1.270	-	-	-	-	-	-	22	500	
SOLIC32-0.4in-0.05in	32	0.826	20.980	0.400	10.16	0.050	1.270	-	-	1.260	32.000	0.630	16	22-25	1,000	
SOLIC32-0.45in-0.05in	32	0.825	20.955	0.450	11.43	0.050	1.270	-	-	1.732	44.000	0.630	16	22-25	1,000	
SOLIC34-0.3in-0.05in	34	-	-	0.300	7.50	0.050	1.270	-	-	-	-	-	-	-	-	-
SOLIC40-0.3in-0.05in	40	-	-	0.300	7.50	0.050	1.270	-	-	-	-	-	-	-	-	-
SOLIC40-0.4in-0.05in	40	1.026	26.060	0.400	10.16	0.050	1.270	-	-	1.732	44.000	0.630 / 0.945	16/24	18	500	
SOLIC40-0.45in-0.05in	40	1.026	26.060	0.450	11.43	0.050	1.270	-	-	1.732	44.000	0.630 / 0.945	16/24	18-22	500	
SOLIC44-0.525in-0.05in	44	1.110	28.194	0.525	13.34	0.050	1.270	-	-	1.732	44.000	0.945	24	17	500	
SOLIC20/24-0.567in-0.02in	20/24	-	-	0.567	14.40	0.020	0.500	-	-	-	-	-	-	-	-	-
SOLIC28/32-0.724in-0.02in	28/32	-	-	0.724	18.40	0.020	0.500	-	-	-	-	-	-	-	-	-

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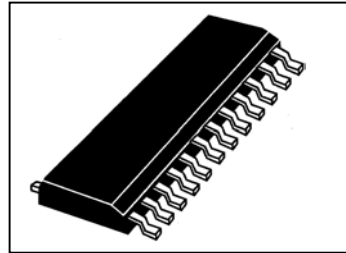
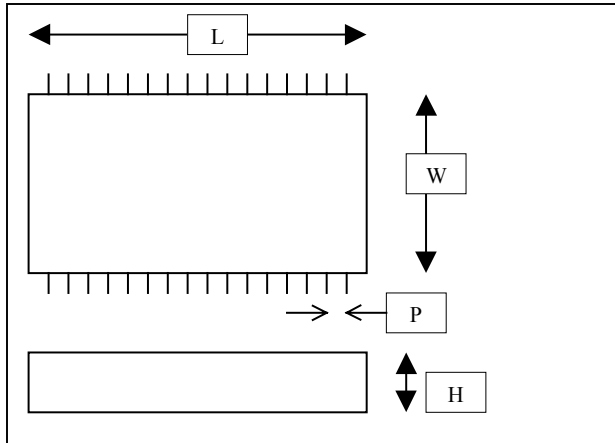
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- 1 -Section 3.2.1 3.2.2 Ver b.doc Revision:16

3.2.3 SSOP Shrink Small Outline Package



Part Number Information:

SSOP14-0.173in-0.026in <-TR>

Pin Count

Pitch

Tape & Reel

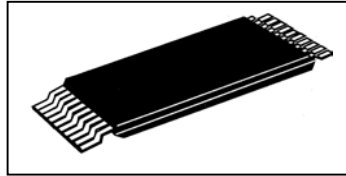
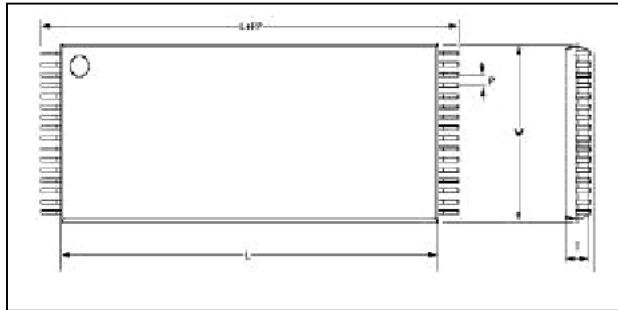
Width

3.2.3 SSOP		Length (L)		Width (W)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty per Tube	Qty Per Reel	Notes
Part Number	Leads	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm			
SSOP8-0.154in-0.025in	8	0.118	3.00	0.154	3.90	0.025	0.635	-	-	-	-	-	-	-	-	-
SSOP8-0.209in-0.0256in	8	0.118	3.00	0.209	5.30	0.026	0.650	0.069	1.8	0.472	12.000	0.315	8	156	2,500	
SSOP14-0.154in-0.025in	14	0.193	4.90	0.154	3.90	0.025	0.635	0.069	1.8	-	-	-	-	97	-	-
SSOP14-0.173in-0.026in	14	0.197	5.00	0.173	4.40	0.026	0.650	0.047	1.2	-	-	-	-	-	-	-
SSOP14-0.209in-0.026in	14	0.244	6.20	0.209	5.30	0.026	0.650	0.068	1.7	0.630	16.000	0.472	12	78	2,000	
SSOP16-0.154in-0.025in	16	0.193	4.90	0.154	3.90	0.025	0.635	0.071	1.8	-	-	-	-	97	-	-
SSOP16-0.173in-0.0256in	16	0.205	5.20	0.173	4.40	0.026	0.650	0.051	1.3	0.472	12.000	0.315	8	-	-	-
SSOP16-0.209in-0.0256in	16	0.244	6.20	0.209	5.30	0.026	0.650	0.068	1.7	0.630	16.000	0.472	12	78	2,000	
SSOP20-0.154in-0.025in	20	0.341	8.661	0.154	3.90	0.025	0.635	0.057	1.800	0.630	16.000	0.315 / 0.472	8/12	55	1,000	
SSOP20-0.173in-0.026in	20	0.256	6.50	0.173	4.40	0.026	0.650	0.051	1.3	0.630	16.000	0.472	12	-	-	-
SSOP20-0.209in-0.0256in	20	0.283	7.20	0.209	5.30	0.026	0.650	0.079	2.0	0.630	16.000	0.472	12	66	1,000	
SSOP24-0.154in-0.025in	24	0.34	8.65	0.154	3.90	0.025	0.635	0.058	1.8	0.630	16.000	0.315	8	-	-	-
SSOP24-0.209in-0.0256in	24	0.323	8.20	0.209	5.30	0.026	0.650	0.068	1.7	0.630	16.000	0.472	12	59	1,000	
SSOP28-0.154in-0.025in	28	0.39	9.910	0.154	3.90	0.025	0.636	0.057	1.8	-	-	-	-	48	-	-
SSOP28-0.209in-0.0256in	28	0.402	10.20	0.209	5.30	0.026	0.650	0.068	1.7	0.945	24.000	0.472	12	47	1,000	
SSOP28-0.295in-0.0256in	28	0.375	9.53	0.295	7.50	0.026	0.650	0.068	1.7	-	-	-	-	-	-	-
SSOP30-0.209in-0.0256in	30	0.402	10.20	0.209	5.30	0.026	0.650	0.079	2.0	-	-	-	-	-	-	-
SSOP34-0.295in-0.0399in	34	0.71	17.94	0.295	7.50	0.040	1.016	0.097	2.5	0.945	24.000	0.0472 / 0.630	12/16	27	1,000	
SSOP36-0.295in-0.031in	36	0.606	15.40	0.295	7.50	0.031	0.800	0.093	2.4	0.945	24.000	0.472	12	31	1,000	
SSOP38-0.209in-0.0256in	38	0.496	12.60	0.209	5.30	0.026	0.650	0.079	2.0	-	-	-	-	-	-	-
SSOP40-0.295in-0.0256in	40	0.53	13.60	0.295	7.50	0.026	0.650	0.085	2.2	-	-	-	-	-	-	-
SSOP44-0.295in-0.022in	44	0.71	17.93	0.295	7.50	0.022	0.570	0.092	2.3	-	-	-	-	27	-	-
SSOP44-0.3in-0.026in	44	-	-	0.300	7.50	0.026	0.650	-	-	-	-	-	-	-	-	-
SSOP44-0.3in-0.031in	44	-	-	0.300	7.50	0.031	0.800	0.091	2.3	1.260	32.000	0.0472 / 0.630	12/16	27	1,000	
SSOP48-0.3in-0.025in	48	0.625	15.88	0.300	7.50	0.025	0.635	0.090	2.3	1.260	32.000	0.630	16	31	1,000	
SSOP48-0.3in-0.039in	48	-	-	0.300	7.50	0.039	1.000	0.091	2.3	1.260	32.000	0.0472 / 0.630	12/16	30	1,000	
SSOP56-0.3in-0.025in	56	0.725	18.43	0.300	7.50	0.025	0.635	0.108	2.8	1.260	32.000	0.630	16	26	1,000	
SSOP64-0.3in-0in	64	-	-	0.300	7.50	-	-	-	-	1.732	44.000	0.630 / 0.945	16/24	N/A	500	
SSOP64-0.4in-0.031in	64	1.028	26.12	0.400	10.16	0.031	0.800	-	-	-	-	-	-	12	-	-
SSOP64-0.472in-0.0315in	64	-	-	0.472	11.99	0.032	0.800	-	-	-	-	-	-	160?	-	-

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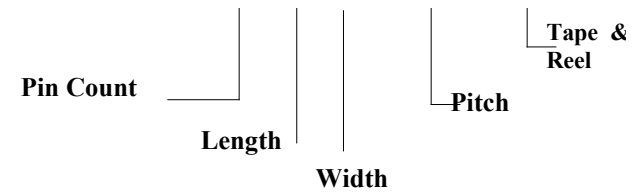
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3.2.4 TSOP-Type 1 Thin Small Outline Package-Type 1

Part Number Information:

TSOP-T1-32-18.4X8mm-0.5mm <-TR>



3.2.4 TSOP-T1 (Type 1)		Length (L)		Width (W)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty per Tube	Qty Per Reel	Notes
Part Number	Leads	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm			
TSOP-T1-20-14.4X6mm-0.5mm	20	0.567	14.40	0.236	6.00	0.020	0.500	0.039	1.0	-	-	-	-	135	-	
TSOP-T1-28-11.8X8mm-0.55mm	28	0.465	11.80	0.315	8.00	0.022	0.550	0.039	1.0	0.945	24.000	0.472	12	234	1,000	3,4,5
TSOP-T1-28-18.4X8mm-0.5mm	28	0.724	18.40	0.315	8.00	0.020	0.500	0.039	1.0	-	-	-	-	-	-	3,4,5
TSOP-T1-32-13.4X8mm-0.5mm	32	0.528	13.40	0.315	8.00	0.020	0.500	0.039	1.0	0.945	24.000	0.472	12	208	1,000	3,4,5
TSOP-T1-32-18.4X8mm-0.5mm	32	0.724	18.40	0.315	8.00	0.020	0.500	0.040	1.0	1.260	32.000	0.0472 / 0.630	12/16	156	1,000	3,4,5
TSOP-T1-40-13.4X10mm-0.5mm	40	0.528	13.40	0.394	10.00	0.020	0.500	0.039	1.0	0.945	24.000	0.630	16	160	1,000	3,4,5
TSOP-T1-40-18.4X10mm-0.5mm	40	0.724	18.40	0.394	10.00	0.020	0.500	0.039	1.0	1.260	32.000	0.630	16	120	1,000	3,4,5
TSOP-T1-48-18.4X12mm-0.5mm	48	0.724	18.40	0.472	12.00	0.020	0.500	0.039	1.0	1.260	32.000	0.630	16	96*	1,000	3,4
TSOP-T1-20/24-14.4X6mm-0.5mm	20/24	0.567	14.40	0.236	6.00	0.020	0.500	0.039	1.0	0.945	24.000	0.472	12	240*	1,000	3,4,5
TSOP-T1-20/26-17.14X7.6mm-1.27mm	20/26	0.675	17.14	0.299	7.60	0.050	1.270	0.039	1.0	0.945	24.000	0.472	12	176*	1,000	4,5
TSOP-T1-28/32-18.4X8mm-0.5mm	28/32	0.724	18.40	0.315	8.00	0.020	0.500	0.039	1.0	1.260	32.000	0.0472 / 0.630	12/16	156*	1,000	3,4,5

Notes:

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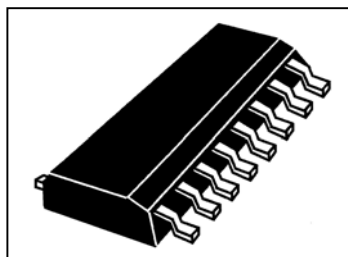
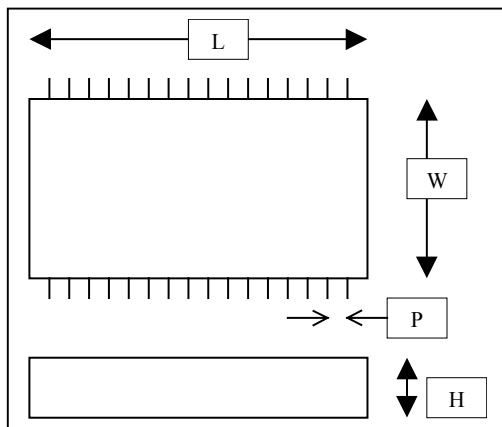
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3.2.5 TSOP-Type 2 Thin Small Outline Package-Type 2

Part Number Information:

TSOP-T2-28-10mm-1.27mm <-TR>

Pin Count

Pitch

Tape &
Reel

Width

3.2.5 TSOP-T2 (Type 2)		Length (L)		Width (W)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty per Tube	Qty Per Reel	Notes
Part Number	Leads	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm			
TSOP-T2-26-7.6mm-1.27mm	26	0.675	17.14	0.299	7.60	0.050	1.270	0.039	1.0	0.945	24.000	0.472	12	176*	1,000	4,5
TSOP-T2-28-10mm-1.27mm	28	0.724	18.40	0.394	10.00	0.050	1.270	0.039	1.0	1.260	32.000	0.630	16	135	500-1,000	4,5
TSOP-T2-32-10.16mm-1.27mm	32	0.825	20.95	0.400	10.16	0.050	1.270	0.039	1.0	1.260	32.000	0.630	16	117*	1,000	4,5
TSOP-T2-44-10.16mm-0.8mm	44	0.725	18.42	0.400	10.16	0.031	0.800	0.039	1.0	1.260	32.000	0.630	16	135*	1,000	4,5
TSOP-T2-48-10mm-0.5mm	48	0.787	20.00	0.394	10.00	0.020	0.500	0.039	1.0	-	-	-	-	-	-	4,5
TSOP-T2-50-10.16mm-0.8mm	50	0.825	20.95	0.400	10.16	0.031	0.800	0.039	1.0	1.260	32.000	0.630	16	117*	1,000	4
TSOP-T2-54-10.16mm-0.8mm	54	0.875	22.22	0.400	10.16	0.031	0.800	0.039	1.0	1.732/1.260	44/32	0.787 / 0630	20/16	108*	1,000	4
TSOP-T2-54-12.7mm-0.8mm	54	0.875	22.22	0.500	12.70	0.031	0.800	0.039	1.0	1.732/1.260	44/32	0.787	20	84*	1,000	4
TSOP-T2-24/26-7.6mm-1.27mm	24/26	0.675	17.14	0.299	7.60	0.050	1.270	0.039	1.0	0.945	24.000	0.472	12	176*	1,000	4,5
TSOP-T2-24/28-10.16mm-1.27mm	24/28	0.725	18.41	0.400	10.16	0.050	1.270	0.039	1.0	1.260	32.000	0.630	16	100,135*	1,000	4,5
TSOP-T2-40/44-10.16mm-0.8mm	40/44	0.725	18.42	0.400	10.16	0.031	0.800	0.039	1.0	1.260	32.000	0.630	16	135*	1,000	4,5
TSOP-T2-44/50-10.16mm-0.8mm	44/50	0.825	20.95	0.400	10.16	0.031	0.800	0.039	1.0	1.260	32.000	0.630	16	117	500-1,000	4,5

Notes:

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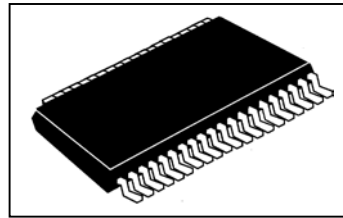
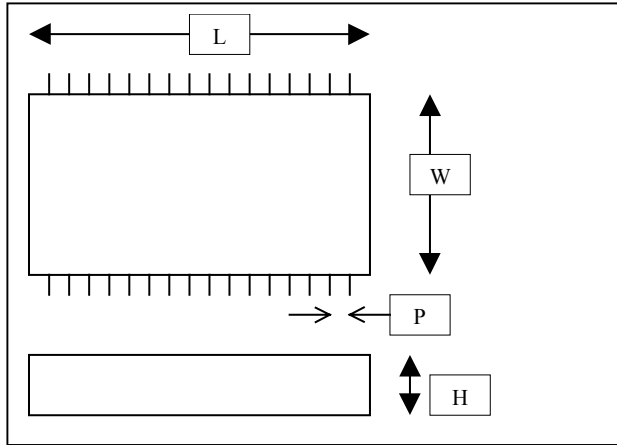
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3.2.6 TSSOP Thin Shrink Small Outline Package

Part Number Information:

TSSOP24-4.4mm-0.65mm <-TR>

Pin Count

Width

Pitch
Tape &
Reel

3.2.6 TSSOP		Length (L)		Width (W)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty per Tube	Qty Per Reel	Notes
Part Number	Leads	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm			
TSSOP5-1.25mm-0.65mm	5	0.080	2.03	0.049	1.25	0.026	0.650	0.039	1.0	-	-	-	-	-	-	-
TSSOP8-3mm-0.65mm	8	0.118	3.00	0.118	3.00	0.026	0.650	0.039	1.0	0.472	12	0.315	8	50-98	3,000	
TSSOP8-4.4mm-0.65mm	8	0.118	3.00	0.173	4.40	0.026	0.650	0.039	1.0	1,480,551	12/16	0.315	8	100	1,000/2,500	
TSSOP10-3mm-0.5mm	10	0.118	3.00	0.118	3.00	0.020	0.500	0.039	1.0	0.472	12	0.315	8	50-98	3,000	
TSSOP10-3mm-0.65mm	10	-	-	0.118	3.00	0.026	0.650	0.039	1.0	-	12	0.315	8	98	2,500	
TSSOP14-4.4mm-0.65mm	14	0.197	5.00	0.173	4.40	0.026	0.650	0.039	1.0	0.472	12	0.315	8	96	2,500	
TSSOP16-4.4mm-0.65mm	16	0.197	5.00	0.173	4.40	0.026	0.650	0.039	1.0	0.472	12	0.315	8	96	2,500	
TSSOP20-4.4mm-0.65mm	20	0.256	6.50	0.173	4.40	0.026	0.650	0.039	1.0	0.630	16	0.315	8	75	2,500	
TSSOP24-4.4mm-0.65mm	24	0.307	7.80	0.173	4.40	0.026	0.650	0.039	1.0	0.630	16	0.315	8	63	1,000/2,500	
TSSOP24-5.6mm-0.65mm	24	0.307	7.80	0.220	5.60	0.026	0.650	0.045	1.2	-	-	-	-	-	-	
TSSOP28-4.4mm-0.65mm	28	0.382	9.70	0.173	4.40	0.026	0.650	0.039	1.0	0.630	16	0.315	8	51	2,500	
TSSOP28-6.1mm-0.65mm	28	0.382	9.70	0.240	6.10	0.026	0.650	0.039	1.0	0.945	24	0.472	12	50	1,000	
TSSOP30-4.4mm-0.5mm	30	0.307	7.80	0.173	4.40	0.022	0.500	0.039	1.0	0.630	16	0.315	8	62	1,000	
TSSOP32-6.1mm-0.65mm	32	0.433	11.00	0.240	6.10	0.026	0.650	0.039	1.0	0.945	24	0.472	12	44	1,000	
TSSOP38-4.4mm-0.5mm	38	0.382	9.70	0.173	4.40	0.020	0.500	0.039	1.0	-	-	-	-	50	-	
TSSOP38-6.1mm-0.65mm	38	0.492	12.50	0.240	6.10	0.026	0.650	0.039	1.0	0.945	24	0.472	12	39	1,000	
TSSOP44-4.4mm-0.55mm	44	-	-	0.173	4.40	0.022	0.550	-	-	-	-	-	-	-	-	
TSSOP44-4.4mm-0.5mm	44	0.445	11.30	0.173	4.40	0.020	0.500	0.039	1.0	0.945	24	0.472	12	39-42	1,000	
TSSOP48-4.4mm-0.65mm	48	-	-	0.173	4.40	0.026	0.650	-	-	-	-	-	-	-	-	
TSSOP48-4.4mm-0.4mm	48	0.382	9.70	0.173	4.40	0.016	0.400	0.039	1.0	0.630	16	0.315 / 0.472	8/12	50	1,000	
TSSOP48-6.1mm-0.5mm	48	0.492	12.50	0.240	6.10	0.022	0.500	0.039	1.0	0.945	24	0.0472 / 0.630	12/16	39	2,000	
TSSOP56-4.4mm-0.4mm	56	0.445	11.30	0.173	4.40	0.016	0.400	0.039	1.0	0.945	24	0.472	12	42	1000-3,000	
TSSOP56-6.1mm-0.5mm	56	0.551	14.00	0.240	6.10	0.020	0.500	0.039	1.0	0.945	24	0.472	12	35	2,000	
TSSOP64-6.1mm-0.5mm	64	0.669	17.00	0.240	6.10	0.020	0.500	0.039	1.0	N/A	N/A	-	-	28	N/A	
TSSOP80-6.1mm-0.4mm	80	0.669	17.00	0.240	6.10	0.016	0.400	0.039	1.0	N/A	N/A	-	-	28	N/A	

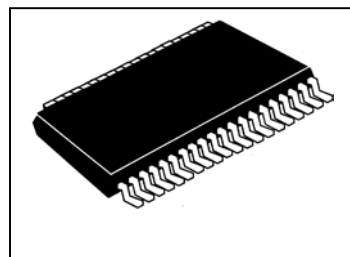
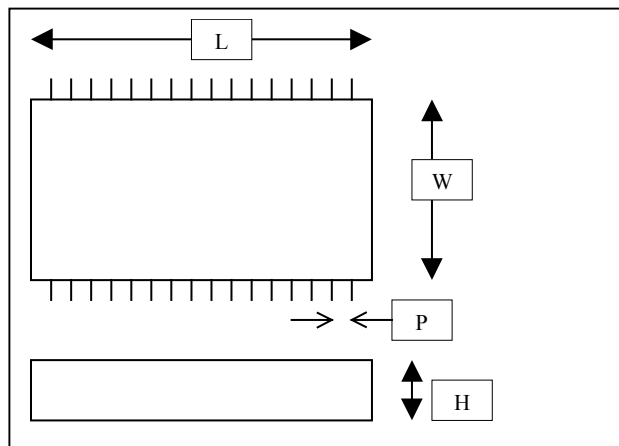
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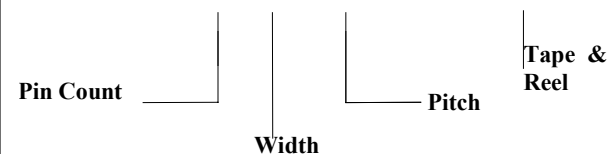
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3.2.7 TSSOP-EXP Thin Shrink Small Outline Package with Exposed Pad

Part Number Information:

TSSOP-EXP20-4.4mm-0.65mm <-TR>



3.2.7 TSSOP-EXP		Length (L)		Width (W)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty per Tube	Qty Per Reel	Note s
Part Number	Lead s	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm			
TSSOP-EXP8-3mm-0.65mm	8	0.118	3.00	0.118	3.00	0.026	0.650	0.039	1.0	-	-	-	-	98	-	
TSSOP-EXP8-4.4mm-0.65mm	8	0.118	3.00	0.173	4.40	0.026	0.650	0.039	1.0	1,480.551	12/16	0.315	8	100	1,000/2,500	
TSSOP-EXP10-3mm-0.5mm	10	0.118	3.00	0.118	3.00	0.020	0.500	0.039	1.0	-	-	-	-	98	-	
TSSOP-EXP14-4.4mm-0.65mm	14	0.197	5.00	0.173	4.40	0.026	0.650	0.039	1.0	0.472/0.630	12/16	0.315	8	96	1,000/2,500	
TSSOP-EXP16-4.4mm-0.65mm	16	0.197	5.00	0.173	4.40	0.026	0.650	0.039	1.0	0.472/0.630	12/16	0.315	8	96	1,000/2,500	
TSSOP-EXP20-4.4mm-0.65mm	20	0.256	6.50	0.173	4.40	0.026	0.650	0.039	1.0	0.630	16	0.315/0.472	8/12	74	1,000/2,500	
TSSOP-EXP24-4.4mm-0.65mm	24	0.307	7.80	0.173	4.40	0.026	0.650	0.039	1.0	-	-	-	-	62	-	
TSSOP-EXP28-4.4mm-0.65mm	28	0.382	9.70	0.173	4.40	0.026	0.650	0.039	1.0	0.630	16	0.315/0.472	8/12	50	1,000/2,500	
TSSOP-EXP28-6.1mm-0.65mm	28	0.382	9.70	0.240	6.10	0.026	0.650	0.039	1.0	0.945	24	0.472	12	50	1,000	
TSSOP-EXP30-4.4mm-0.5mm	30	0.307	7.80	0.173	4.40	0.020	0.500	0.039	1.0	-	-	-	-	62	-	
TSSOP-EXP32-6.1mm-0.65mm	32	0.433	11.00	0.240	6.10	0.026	0.650	0.039	1.0	-	-	-	-	44	-	
TSSOP-EXP38-4.4mm-0.5mm	38	0.382	9.70	0.173	4.40	0.020	0.500	0.039	1.0	-	-	-	-	50	-	
TSSOP-EXP38-6.1mm-0.65mm	38	0.492	12.50	0.240	6.10	0.026	0.650	0.039	1.0	-	-	-	-	39	-	
TSSOP-EXP44-4.4mm-0.5mm	44	0.445	11.30	0.173	4.40	0.020	0.500	0.039	1.0	-	-	-	-	42	-	
TSSOP-EXP48-4.4mm-0.4mm	48	0.382	9.70	0.173	4.40	0.016	0.400	0.039	1.0	-	-	-	-	50	-	
TSSOP-EXP48-6.1mm-0.5mm	48	0.846	21.50	0.240	6.10	0.020	0.500	0.039	1.0	-	-	-	-	39	-	
TSSOP-EXP56-4.1mm-0.4mm	56	0.445	11.30	0.161	4.10	0.016	0.400	0.039	1.0	-	-	-	-	42	-	
TSSOP-EXP56-6.1mm-0.65mm	56	0.551	14.00	0.240	6.10	0.026	0.650	0.039	1.0	0.945	24	0.472	12	35	1,000	
TSSOP-EXP64-6.1mm-0.5mm	64	0.669	17.00	0.240	6.10	0.020	0.500	0.039	1.0	-	-	-	-	28	-	
TSSOP-EXP80-6.1mm-0.4mm	80	0.669	17.00	0.240	6.10	0.016	0.400	0.039	1.0	-	-	-	-	28	-	

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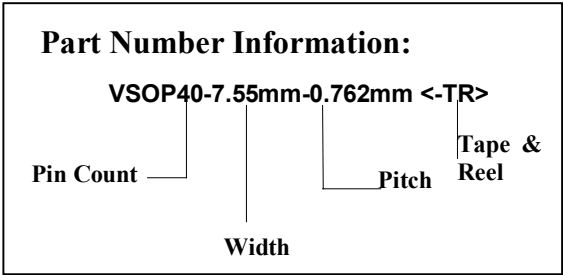
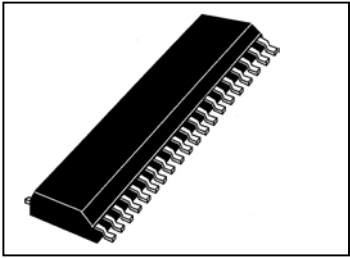
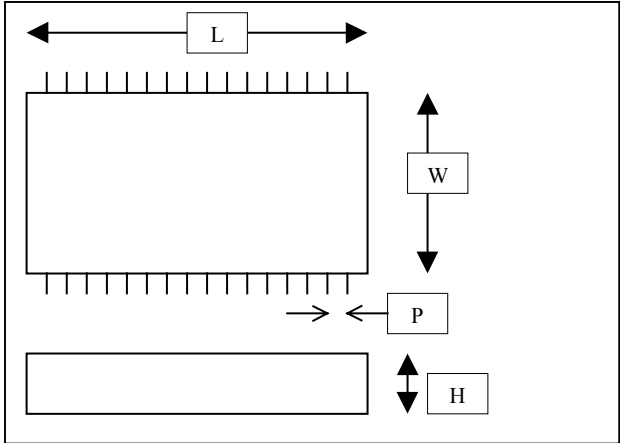
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3.2.8 VSOP-EXP Very Small Outline Package



3.2.8 VSOP		Length (L)		Width (W)		Pitch (P)		Height (H)		Tape Width		Tape Pitch				
Part Number	Leads	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	Qty per Tube	Qty Per Reel	Notes
VSOP40-7.55mm-0.762mm	40	0.606	15.40	0.297	7.55	0.030	0.762	0.093	2.4	0.945	24	0.630	16	31	300,500	
VSOP56-11.05mm-0.75mm	56	0.846	21.50	0.435	11.05	0.030	0.750	0.115	2.9	1.260	32	0.787	20	22	1,000/2,500	

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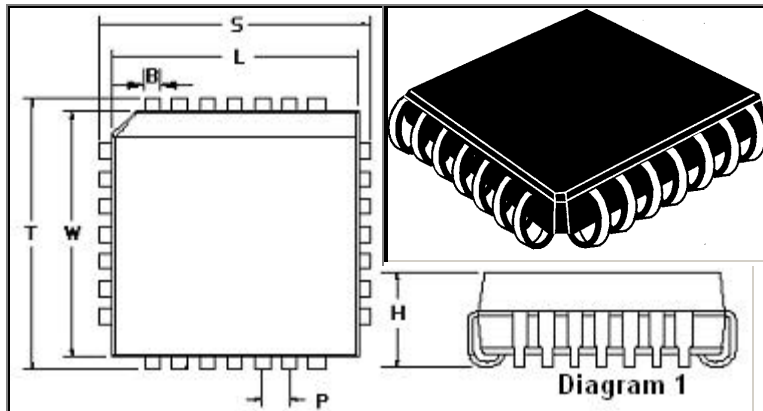
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3.4.1 PLCC

Plastic Leaded Chip Carriers



Part Number Information:

PLCC68

Pin Count

Package Style:

PLCC-Plastic Leaded Chip Carrier

Part Number	Diagram	Leads		Body Length (L)	Body Width (W)	Total Width (S)	Total Length (T)	Lead Width (B)	Pitch (P)	Height (H)	Tape Width	Tape Pitch	Qty per Tube	Qty Per Reel	Notes
PLCC18	1	18	in	0.490	0.290	0.325	0.525	0.017	0.050	0.145	0.94	0.47			
			mm	12.45	7.37	8.26	13.34	0.43	1.27	3.68	24.0	12.0			
PLCC20	1	20	in	0.352	0.353	0.390	0.390	0.011	0.050	0.172	0.63	0.47	46	100/1000	
			mm	8.94	8.97	9.91	9.91	0.29	1.27	4.37	16.0	12.0			
PLCC28R		28	in	0.550	0.350	0.390	0.590	0.018	0.050	0.132	0.94	0.47		750	
			mm	13.95	8.89	9.89	15.0	0.46	1.27	3.38	24.0	12.0			
PLCC28	1	28	in	0.454	0.454	0.490	0.490	0.018	0.050	0.170	0.94	0.63	37	750/1000	
			mm	11.53	11.53	12.45	12.45	0.46	1.27	4.32	24.0	16.0			
PLCC32	1	32	in	0.550	0.450	0.490	0.590	0.018	0.050	0.130	0.94	0.63	30/32	500/750/1000	
			mm	13.97	11.44	12.45	15.00	0.46	1.27	3.30	24.0	16.0			
PLCC44	1	44	in	0.654	0.654	0.690	0.690	0.018	0.050	0.171	1.26	0.94	26	350/400/450/500/520	
			mm	16.61	16.61	17.52	17.52	0.46	1.27	4.34	32.0	24.0			



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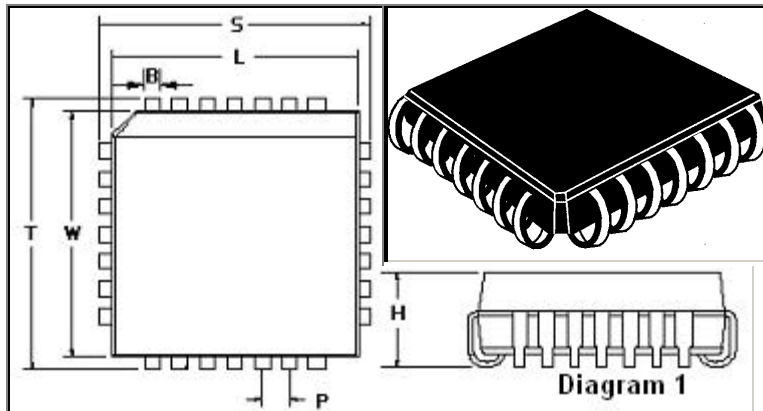
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3.4.1 PLCC

Plastic Leaded Chip Carriers



Part Number Information:

PLCC68

Pin Count

Package Style:

PLCC-Plastic Leaded Chip Carrier

Part Number	Diagram	Leads		Body Length (L)	Body Width (W)	Total Width (S)	Total Length (T)	Lead Width (B)	Pitch (P)	Height (H)	Tape Width	Tape Pitch	Qty per Tube	Qty Per Reel	Notes
PLCC52	1	52	in	0.750	0.750	0.790	0.790	0.018	0.050	0.170	1.26	0.94	23	500	
			mm	19.05	19.05	20.07	20.07	0.46	1.27	4.32	32.0	24.0			
PLCC68	1	68	in	0.954	0.954	0.990	0.990	0.018	0.050	0.170	1.73	1.26	14/18/19	230/250/350/500	
			mm	24.23	24.23	25.15	25.15	0.46	1.27	4.32	44.0	32.0			
PLCC84		84	in	1.154	1.154	1.190	1.190	0.016	0.050	0.170	1.73	1.42	15/24*/	240/250	1
			mm	29.31	29.31	30.23	30.23	0.41	1.27	4.32	44.0	36.0			
PLCC100	1	100	in	1.350	1.350				0.050		2.20	1.57			
			mm	34.29	34.29				1.27		56.0	40.0			



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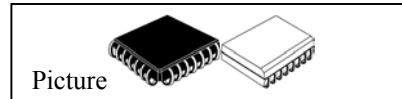
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Diagram

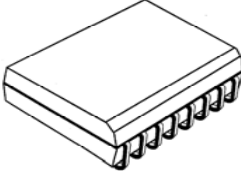
Diagram



3.4.2 SOJ Plastic Leaded Chip Carriers

Part Number System

Part Number System



SOJ

**Small Outline "J"
lead**

Part Number	Leads	Width in (mm)
SOJ16-.300in	16	.300 (7.62)
SOJ18-.300in	18	.300 (7.62)
SOJ20/26-.300in	20/26	.300 (7.62)
SOJ24-.300in	24	.300 (7.62)
SOJ24/26-.300in	24/26	.300 (7.62)
SOJ24/28-.400in	24/28	.400 (10.16)
SOJ26-.???in	26	?
SOJ28-.300in	28	.300 (7.62)
SOJ28-.400in	28	.400 (10.16)
SOJ32-.300in	32	.300 (7.62)
SOJ32-.400in	32	.400 (10.16)
SOJ36-.400in	36	.400 (10.16)
SOJ40-.400in	40	.400 (10.16)

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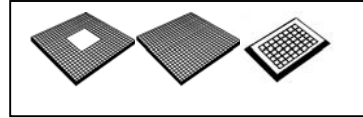
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Diagram



3.5.1 μ BGA-Mbga Micro Ball Grid Array

Part Number System

3.5.1 μ BGA-mBGA Micro Ball Grid Array		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate Material	Ball Pattern	Outer Ball Matrix	Center Ball Matrix
Part Number	Balls	in	mm	in	mm	in	mm	in	mm					
μ BGA44-11.25x5.63mm-0.65mm	44	0.443	11.25	0.222	5.63	0.026	0.650	0.013	0.325	1		See Diagram	8x6	
μ BGA46-7.87x5.76mm-0.75mm	46	0.310	7.87	0.227	5.76	0.030	0.750	0.013	0.325	2	Flex Polyimide Tape	Full	8x6	N/A
μ BGA62-11.5x9.3mm-0.8mm	62	0.453	11.50	0.366	9.30	0.031	0.800	0.013	0.325	3	Flex Polyimide Tape	See Diagram	12x9	N/A
μ BGA74-12.7x18.7mm-0.75mm	74	0.500	12.70	0.736	18.70	0.030	0.750	0.012	0.300	4	Flex Polyimide Tape	See Diagram	16x7	N/A
μ BGA188-13.1x13.1mm-0.5mm	188	0.516	13.10	0.516	13.10	0.020	0.500	0.013	0.320	5	Flex Polyimide Tape	See Diagram	See Diagram	N/A
μ BGA208-9.28x9.28mm-0.5mm	208	0.365	9.28	0.365	9.28	0.020	0.500	0.012	0.300	6	Flex Polyimide Tape	See Diagram	15x15	N/A

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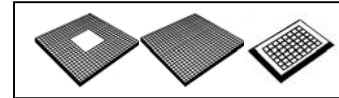
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Diagram

Part Number System



3.5.3 PBGA

Plastic Ball Grid Array

3.5.3 PBGA-Plastic Ball Grid Array		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
PBGA144-13x13mm-1mm	144	0.512	13.00	0.512	13.00	0.039	1.000	0.020	0.510	1	Bismaleimide-Triazine/Epoxy	Full Array	12x12	NA	0.039-0.081	1.0-2.06	160	
PBGA144-13x13mm-1mm	144	0.512	13.00	0.512	13.00	0.039	1.000	0.020	0.500		Bismaleimide-Triazine/Epoxy	Full Array	12x12		-	-	160	
PBGA121-15x15mm-1.27mm	121	0.591	15.00	0.591	15.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Full Array	11x11	NA	0.039-0.092	1.0-2.33	126	
PBGA156-15x15mm-1mm	156	0.591	15.00	0.591	15.00	0.039	1.000	0.020	0.510	2	Bismaleimide-Triazine/Epoxy	Perimeter 4	14x14	NA	0.039-0.079	1.0-2.0	126	
PBGA160-15x15mm-1mm	160	0.591	15.00	0.591	15.00	0.039	1.000	0.020	0.510		Bismaleimide-Triazine/Epoxy	Perimeter	14x14		0.039-0.069	1.00-1.76	126	
PBGA196-15x15mm-1mm	196	0.591	15.00	0.591	15.00	0.039	1.000	0.020	0.510	3/4	Bismaleimide-Triazine/Epoxy	Full Array	14x14	NA	0.039-0.079	1.0-2.0	126	

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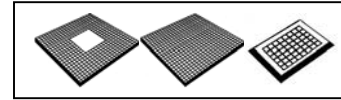
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- 1 - 3.5.3 PBGA-Plastic Ball Grid Array.doc Revision:64

Diagram

Part Number System



3.5.3 PBGA

Plastic Ball Grid Array

3.5.3 PBGA-Plastic Ball Grid Array Cont.		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
PBGA86-15.5x14mm-1.14mm	86	0.610	15.50	0.551	14.00	0.045	1.140	-	-		Bismaleimide-Triazine/Epoxy				-	-	-	
PBGA192-17x17mm-1mm	192	0.669	17.00	0.669	17.00	0.039	1.000	0.020	0.510		Bismaleimide-Triazine/Epoxy	Perimeter 4	16x16		-	-	90	
PBGA208-17x17mm-1mm	208	0.669	17.00	0.669	17.00	0.039	1.000	0.020	0.510		Bismaleimide-Triazine/Epoxy	Perimeter 4	16x16	4x4	0.039-0.069	1.00-1.76	90	
PBGA256-17x17mm-1mm	256	0.669	17.00	0.669	17.00	0.039	1.000	0.020	0.510	5	Bismaleimide-Triazine/Epoxy	Full Array	16x16	NA	0.039-0.079	1.0-2.0	90	
PBGA240-19x19mm-1mm	240	0.748	19.00	0.748	19.00	0.039	1.000	0.020	0.510		Bismaleimide-Triazine/Epoxy	Perimeter	18x18		0.061-0.069	1.56-1.76	-	
PBGA289-19x19mm-1mm	289	0.748	19.00	0.748	19.00	0.039	1.000	0.020	0.510		Bismaleimide-Triazine/Epoxy	Perimeter	17x17		0.061-0.069	1.56-1.76	-	

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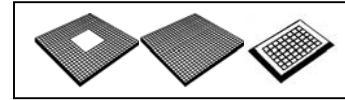
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3.5.3 PBGA

Plastic Ball Grid Array

3.5.3 PBGA-Plastic Ball Grid Array Cont.		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
PBGA324-19x19mm-1mm	324	0.748	19.00	0.748	19.00	0.039	1.000	0.020	0.510		Bismaleimide-Triazine/Epoxy	Perimeter	18x18		0.061-0.069	1.56-1.76	-	
PBGA400-21x21mm-1mm	400	0.827	21.00	0.827	21.00	0.039	1.000	0.024	0.600	7	Bismaleimide-Triazine/Epoxy	Full Array	20x20	NA	0.065-0.079	1.66-2.0	60	
PBGA119-22x14mm-1.27mm	119	0.866	22.00	0.551	14.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Full Array	7x17		0.081	2.06	96	
PBGA153-22x14mm-1.27mm	153	0.866	22.00	0.551	14.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Full Array	9x17		0.081	2.06	96	
PBGA119-23x14mm-1.27mm	119	0.906	23.00	0.551	14.00	0.050	1.270	0.030	0.750	10	Bismaleimide-Triazine/Epoxy	Full Array	7x17	NA	0.083-0.091	2.1-2.3	84	
PBGA169-23x23mm-1.5mm	169	0.906	23.00	0.906	23.00	0.059	1.500	0.030	0.760	22	Bismaleimide-Triazine/Epoxy	Full Array	13x13		0.039-0.091	1.0-2.32	60	

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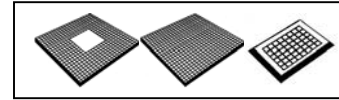
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Diagram

Part Number System



3.5.3 PBGA

Plastic Ball Grid Array

3.5.3 PBGA-Plastic Ball Grid Array Cont.		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
PBGA208-23x23mm-1.27mm	208	0.906	23.00	0.906	23.00	0.050	1.270	0.030	0.760	11	Bismaleimide-Triazine/Epoxy	Perimeter 4	17x17	N/A	0.083-0.092	2.1-2.33	60/90	
PBGA217-23x23mm-1.27mm	217	0.906	23.00	0.906	23.00	0.050	1.270	0.030	0.760	12	Bismaleimide-Triazine/Epoxy	Perimeter 4	17x17	3x3	0.083-0.092	2.1-2.33	60	
PBGA240-23x23mm-1.27mm	240	0.906	23.00	0.906	23.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Perimeter	17x17		0.092	2.33	60	
PBGA249-23x23mm-1.27mm	249	0.906	23.00	0.906	23.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Perimeter	17x17		0.092	2.33	60	
PBGA288-23x23mm-1mm	288	0.906	23.00	0.906	23.00	0.039	1.000	0.025	0.630	6	Bismaleimide-Triazine/Epoxy	Perimeter 4	22x22	NA	0.065-0.092	1.66-2.23	60	
PBGA289-23x23mm-1.27mm	289	0.906	23.00	0.906	23.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Full Array	17x17		0.084-0.092	2.13-2.33	-	1

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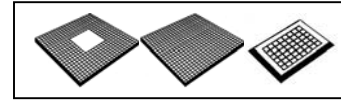
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3.5.3 PBGA

Plastic Ball Grid Array

3.5.3 PBGA-Plastic Ball Grid Array Cont.		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
PBGA324-23x23mm-1mm	324	0.906	23.00	0.906	23.00	0.039	1.000	0.025	0.630		Bismaleimide-Triazine/Epoxy	Perimeter	22x22		0.039-0.092	1.0-2.23	60	
PBGA484-23x23mm-1mm	484	0.906	23.00	0.906	23.00	0.039	1.000	0.025	0.630	8	Bismaleimide-Triazine/Epoxy	Full Array	22x22	NA	0.083-0.092	2.1-2.33	60	1
PBGA357-25x25mm-1.27mm	357	0.984	25.00	0.984	25.00	0.050	1.270	0.030	0.750	20	Bismaleimide-Triazine/Epoxy	Full Array	19x19	NA	0.083 Max	2.1 Max	24	
PBGA225-27x27mm-1.5mm	225	1.063	27.00	1.063	27.00	0.059	1.500	0.030	0.760	23	Bismaleimide-Triazine/Epoxy	Full Array	15x15		0.039-0.092	1.0-2.33	40	
PBGA256-27x27mm-1.27mm	256	1.063	27.00	1.063	27.00	0.050	1.270	0.030	0.760	13	Bismaleimide-Triazine/Epoxy	Perimeter 4	20x20	NA	0.039-0.092	1.0-2.33	40	
PBGA272-27x27mm-1.27mm	272	1.063	27.00	1.063	27.00	0.050	1.270	0.030	0.760	16	Bismaleimide-Triazine/Epoxy	Perimeter 4	20x20	4x4	0.039-0.092	1.0-2.33	40	

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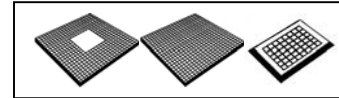
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Part Number System



3.5.3 PBGA

Plastic Ball Grid Array

3.5.3 PBGA-Plastic Ball Grid Array Cont.		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
PBGA292-27x27mm-1.27mm	292	1.063	27.00	1.063	27.00	0.050	1.270	-	-		Bismaleimide-Triazine/Epoxy	Perimeter	20x20		0.039	1.00	40	
PBGA300-27x27mm-1.27mm	300	1.063	27.00	1.063	27.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Perimeter	20x20		0.084-0.092	2.13-2.33	40	
PBGA316-27x27mm-1.27mm	316	1.063	27.00	1.063	27.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Perimeter	20x20		0.084-0.092	2.13-2.33	40	
PBGA324-27x27mm-1.27mm	324	1.063	27.00	1.063	27.00	0.050	1.270	-	-		Bismaleimide-Triazine/Epoxy	Perimeter	20x20		0.039	1.00	40	
PBGA328-27x27mm-1.27mm	328	1.063	27.00	1.063	27.00	0.050	1.270	-	-		Bismaleimide-Triazine/Epoxy	Perimeter	20x20+	4x4	-	-	-	
PBGA356-27x27mm-1.27mm	356	1.063	27.00	1.063	27.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Perimeter	20x20		0.094	2.38	40	

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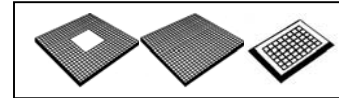
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- 6 - 3.5.3 PBGA-Plastic Ball Grid Array.doc Revision:64

Diagram

Part Number System



3.5.3 PBGA

Plastic Ball Grid Array

3.5.3 PBGA-Plastic Ball Grid Array Cont.		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
PBGA400-27x27mm-1.27mm	400	1.063	27.00	1.063	27.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Full Array	20x20		0.084-0.092	2.13-2.33	-	1
PBGA416-27x27mm-1mm	416	1.063	27.00	1.063	27.00	0.039	1.000	0.025	0.630		Bismaleimide-Triazine/Epoxy	Perimeter	26x26		0.083 Max	2.1 Max	40	
PBGA672-27x27mm-1mm	672	1.063	27.00	1.063	27.00	0.039	1.000	0.024	0.600	9	Bismaleimide-Triazine/Epoxy	Full Array	26x26	NA	0.083 Max	2.1 Max	40	1
PBGA676-27x27mm-1mm	676	1.063	27.00	1.063	27.00	0.039	1.000	0.025	0.630		Bismaleimide-Triazine/Epoxy	Full Array	26x26		0.080-0.092	2.03-2.23	40	
PBGA304-31x31mm-1.27mm	304	1.220	31.00	1.220	31.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Perimeter	23x23		0.092	2.33	40	
PBGA329-31x31mm-1.27mm	329	1.220	31.00	1.220	31.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Perimeter	23x23		0.092	2.33	27	

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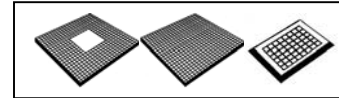
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3.5.3 PBGA

Plastic Ball Grid Array

3.5.3 PBGA-Plastic Ball Grid Array Cont.		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
PBGA360-31x31mm-1.27mm	360	1.220	31.00	1.220	31.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Perimeter	23x23		0.092	2.33	27	
PBGA385-31x31mm-1.27mm	385	1.220	31.00	1.220	31.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Perimeter	23x23		0.092	2.33	27	
PBGA516-31x31mm-1mm	516	1.220	31.00	1.220	31.00	0.039	1.000	0.025	0.630		Bismaleimide-Triazine/Epoxy	Perimeter	30x30		0.088	2.23	27	
PBGA529-31x31mm-1.27mm	529	1.220	31.00	1.220	31.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Full Array	23x23		0.092	2.33	-	1
PBGA900-31x31mm-1mm	900	1.220	31.00	1.220	31.00	0.039	1.000	0.025	0.630		Bismaleimide-Triazine/Epoxy	Full Array	30x30		0.088	2.23	-	1
PBGA313-35x35mm-1.27mm	313	1.378	35.00	1.378	35.00	0.050	1.270	0.030	0.760	17	Bismaleimide-Triazine/Epoxy	Stagger	25x25	NA	0.039-0.092	1.0-2.33	24	

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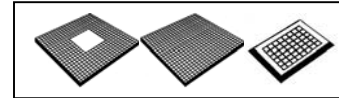
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3.5.3 PBGA

Plastic Ball Grid Array

3.5.3 PBGA-Plastic Ball Grid Array Cont.		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
PBGA352-35x35mm-1.27mm	352	1.378	35.00	1.378	35.00	0.050	1.270	0.030	0.760	18	Bismaleimide-Triazine/Epoxy	Perimeter 4	26x26	NA	0.039-0.092	1.0-2.33	24	
PBGA388-35x35mm-1.27mm	388	1.378	35.00	1.378	35.00	0.050	1.270	0.030	0.760	19	Bismaleimide-Triazine/Epoxy	Perimeter 4	26x26	6x6	0.039-0.092	1.0-2.33	24	
PBGA400-35x35mm-1.5mm	400	1.378	35.00	1.378	35.00	0.059	1.500	0.030	0.750	24	Bismaleimide-Triazine/Epoxy	Full Array	20x20		0.083 Max	2.1 Max	24	
PBGA420-35x35mm-1.27mm	420	1.378	35.00	1.378	35.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Perimeter	26x26		0.039	1.00	24	
PBGA452-35x35mm-1.27mm	452	1.378	35.00	1.378	35.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Perimeter	26x26		0.094	2.38	24	
PBGA456-35x35mm-1.27mm	456	1.378	35.00	1.378	35.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Perimeter	26x26		0.092	2.33	24	

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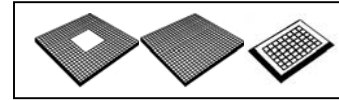
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3.5.3 PBGA

Plastic Ball Grid Array

3.5.3 PBGA-Plastic Ball Grid Array Cont.		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
PBGA480-35x35mm-1.27mm	480	1.378	35.00	1.378	35.00	0.050	1.270	-	-		Bismaleimide-Triazine/Epoxy	Perimeter	26x26		0.039	1.00	24	
PBGA580-35x35mm-1mm	580	1.378	35.00	1.378	35.00	0.039	1.000	0.025	0.630		Bismaleimide-Triazine/Epoxy	Perimeter	34x34		0.088	2.23	24	
PBGA676-35x35mm-1.27mm	676	1.378	35.00	1.378	35.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Full Grid	26x26		0.039-0.092	1.0-2.33	24	
PBGA680-35x35mm-1mm	680	1.378	35.00	1.378	35.00	0.039	1.000	0.025	0.630		Bismaleimide-Triazine/Epoxy	Perimeter	34x34		0.088	2.23	24	
PBGA1156-35x35mm-1mm	###	1.378	35.00	1.378	35.00	0.039	1.000	0.025	0.630		Bismaleimide-Triazine/Epoxy	Full Array	34x34		0.088	2.23	-	1
PBGA524-37.5x37.5mm-1.27mm	524	1.476	37.50	1.476	37.50	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Perimeter	28x28		0.092	2.33	21	

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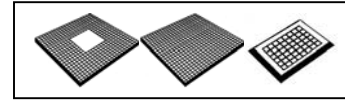
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Part Number System



3.5.3 PBGA

Plastic Ball Grid Array

3.5.3 PBGA-Plastic Ball Grid Array Cont.		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
PBGA784-37.5x37.5mm-1.27mm	784	1.476	37.50	1.476	37.50	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Full Array	28x28		0.092	2.33	21	1
PBGA564-40x40mm-1.27mm	564	1.575	40.00	1.575	40.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Perimeter	30x30		0.092	2.33	24	
PBGA900-40x40mm-1.27mm	900	1.575	40.00	1.575	40.00	0.050	1.270	0.030	0.760		Bismaleimide-Triazine/Epoxy	Full Array	30x30		0.092	2.33	-	1
PBGA1225-45x45mm-1.27mm	###	1.772	45.00	1.772	45.00	0.050	1.270	0.030	0.750	21	Bismaleimide-Triazine/Epoxy	Full Array	35x35	na	0.083 Max	2.1 Max	12	

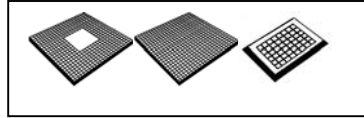
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Part Number System

3.5.11 CSBGA flexBGA/TABGA

3.5.12 CSBGA (FBGA/TBGA Flex/Tape) BGA 1		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate Material	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
CABGA28-5x5mm-0.8mm	28	0.197	5.00	0.197	5.00	0.031	0.800	-	-		Bismaleimide-Triazine	Perimeter 2	2x2		-	-	-	
CABGA40-5x5mm-0.5mm	40	0.197	5.00	0.197	5.00	0.020	0.500	0.012	0.310	1	Bismaleimide-Triazine	Perimeter 2	8x8	N/A	0.049	1.24	624	
CABGA48-5x5mm-0.5mm	48	0.197	5.00	0.197	5.00	0.020	0.500	0.012	0.310	2	Flex Polyimide Tape	Perimeter 2	8x8	N/A	0.040	1.02	624	
CABGA64-5x5mm-0.5mm	64	0.197	5.00	0.197	5.00	0.020	0.500	-	-		Flex Polyimide Tape	Full Array	8x8		0.038	0.970	-	
CABGA28-6x6mm-0.8mm	28	0.236	6.00	0.236	6.00	0.031	0.800	0.022	0.550		Laminate	Perimeter 2	6x6	N/A	0.067	1.70	-	
CABGA48-6x6mm-0.5mm	48	0.236	6.00	0.236	6.00	0.020	0.500	-	-		Flex Polyimide Tape				-	-	-	
CABGA49-6x6mm-0.8mm	49	0.236	6.00	0.236	6.00	0.031	0.800	0.018	0.460	7	Flex Polyimide Tape	Full Array	7x7	N/A	0.055	1.40	608	
CABGA56-6x6mm-0.5mm	56	0.236	6.00	0.236	6.00	0.020	0.500	0.012	0.310	3	Bismaleimide-Triazine	Perimeter 2	10x10	N/A	0.049	1.24	608	
CABGA64-6x6mm-0.5mm	64	0.236	6.00	0.236	6.00	0.020	0.500	0.012	0.300		Flex Polyimide Tape	Full Array	8x8		0.038	0.97	608	
CABGA84-6x6mm-0.5mm	84	0.236	6.00	0.236	6.00	0.020	0.500	0.012	0.300		Flex Polyimide Tape	Perimeter 3	10x10		0.038	0.97	608	

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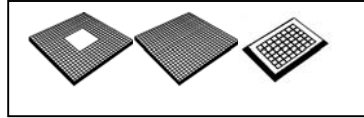
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Diagram



Part Number System

3.5.11 CSBGA flexBGA/TABGA

3.5.12 CSBGA (FBGA/TBGA Flex/Tape) BGA Cont. 2		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate Material	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
CABGA46-7x7mm-0.5mm	46	0.276	7.00	0.276	7.00	0.020	0.500	-	-		Flex Polyimide Tape				-	-	-	
CABGA80-7x7mm-0.5mm	80	0.276	7.00	0.276	7.00	0.020	0.500	0.012	0.300		Flex Polyimide Tape	Perimeter 2	12x12		0.038	0.97	476	
CABGA112-7x7mm-0.5mm	112	0.276	7.00	0.276	7.00	0.020	0.500	0.012	0.300		Flex Polyimide Tape	Perimeter 3	12x12		0.038	0.97	476	
CABGA115-7x7mm-0.5mm	115	0.276	7.00	0.276	7.00	0.020	0.500	-	-		Flex Polyimide Tape				-	-	-	
CABGA48-7.9x6.5mm-0.75mm	48	0.311	7.90	0.256	6.50	0.030	0.750	-	-		Flex Polyimide Tape	Full Array	6x8		-	-	-	
CABGA48-8x7mm-0.75mm	48	0.315	8.00	0.276	7.00	0.030	0.750	-	-		Flex Polyimide Tape	Full Array	8x6		-	-	-	
CABGA48-8x8mm-0.8mm	48	0.315	8.00	0.315	8.00	0.031	0.800	0.018	0.460	6	Bismaleimide-Triazine	Full Array	6x8	N/A	0.055	1.40	80	
CABGA64-8x8mm-0.8mm	64	0.315	8.00	0.315	8.00	0.031	0.800	0.018	0.460	8	Flex Polyimide Tape	Full Array	8x8	N/A	0.043	1.10	360	
CABGA81-8x8mm-0.8mm	81	0.315	8.00	0.315	8.00	0.031	0.800	0.018	0.460	9	Flex Polyimide Tape	Full Array	9x9	N/A	0.043	1.10	360	

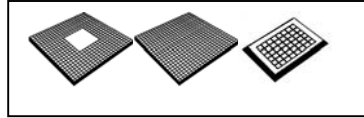
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Part Number System

3.5.11 CSBGA flexBGA/TABGA

3.5.12 CSBGA (FBGA/TBGA Flex/Tape) BGA Cont. 3		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate Material	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
CABGA96-8x8mm-0.5mm	96	0.315	8.00	0.315	8.00	0.020	0.500	0.012	0.310	4	Flex Polyimide Tape	Perimeter 2	10x10	N/A	0.049	1.24	360	
CABGA96-8x8mm-0.5mm	96	0.315	8.00	0.315	8.00	0.020	0.500	0.012	0.300		Flex Polyimide Tape	Perimeter 2	14x14		0.038	0.97	360	
CABGA108-8x8mm-0.5mm	108	0.315	8.00	0.315	8.00	0.020	0.500	0.012	0.310	5	Bismaleimide-Triazine	Perimeter 3	14x14	N/A	0.049	1.24	360	
CABGA132-8x8mm-0.5mm	132	0.315	8.00	0.315	8.00	0.020	0.500	0.012	0.300		Flex Polyimide Tape	Perimeter 3	14x14		0.038	0.97	360	
CABGA48-9x7mm-0.8mm	48	0.354	9.00	0.276	7.00	0.031	0.800	0.018	0.460	6	Bismaleimide-Triazine	Full Array	6x8	N/A	0.055	1.40	325	
CABGA100-9x9mm-0.8mm	100	0.354	9.00	0.354	9.00	0.031	0.800	0.018	0.460	10	Flex Polyimide Tape	Full Array	10x10	N/A	0.043	1.10	308	
CABGA100-10x10mm-0.8mm	100	0.394	10.00	0.394	10.00	0.031	0.800	0.018	0.460	11	Bismaleimide-Triazine	Full Array	10x10	N/A	0.055	1.40	250	
CABGA112-10x10mm-0.8mm	112	0.394	10.00	0.394	10.00	0.031	0.800	0.018	0.460	12	Flex Polyimide Tape	Perimeter 4	11x11	N/A	0.043	1.10	250	
CABGA144-10x10mm-0.8mm	144	0.394	10.00	0.394	10.00	0.031	0.800	0.018	0.460		Flex Polyimide Tape	Full Array	12x12		0.043	1.10	250	

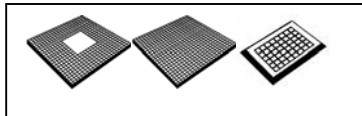
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Part Number System

3.5.11 CSBGA flexBGA/TABGA

3.5.12 CSBGA (FBGA/TBGA Flex/Tape) BGA Cont. 4		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate Material	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
CABGA180-10x10mm-0.5mm	180	0.394	10.00	0.394	10.00	0.020	0.500	-	-		Flex Polyimide Tape	Perimeter 3	18x18		0.038	0.970	-	
CABGA100-11x11mm-1mm	100	0.433	11.00	0.433	11.00	0.039	1.000	0.018	0.460		Flex Polyimide Tape	Full Array	9x9		0.043	1.10	—	
CABGA204-11x11mm-0.5mm	204	0.433	11.00	0.433	11.00	0.020	0.500	-	-		Flex Polyimide Tape				0.043	1.100	-	
CABGA132-12x12mm-0.8mm	132	0.472	12.00	0.472	12.00	0.031	0.800	0.018	0.460	13	Flex Polyimide Tape	Perimeter 3	14x14	N/A	0.043	1.10	198	
CABGA132-12x12mm-0.8mm	132	0.472	12.00	0.472	12.00	0.031	0.800	0.018	0.460		Flex Polyimide Tape	Perimeter	12x12		0.043	1.10	198	
CABGA144-12x12mm-0.8mm	144	0.472	12.00	0.472	12.00	0.031	0.800	0.018	0.460	14	Flex Polyimide Tape	Perimeter 4	13x13	N/A	0.043	1.10	198	
CABGA160-12x12mm-0.8mm	160	0.472	12.00	0.472	12.00	0.031	0.800	0.018	0.460	?	Flex Polyimide Tape	Perimeter	13x13	N/A	0.043	1.10	198	
CABGA180-12x12mm-0.8mm	180	0.472	12.00	0.472	12.00	0.031	0.800	0.018	0.460	15	Flex Polyimide Tape	Perimeter 5	14x14	N/A	0.043	1.10	198	

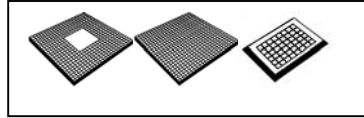
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Part Number System

3.5.11 CSBGA flexBGA/TABGA

3.5.12 CSBGA (FBGA/TBGA Flex/Tape) BGA Cont. 5		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate Material	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
CABGA228-12x12mm-1mm	228	0.472	12.00	0.472	12.00	0.039	1.000	-	-		Flex Polyimide Tape				-	-	-	
CABGA228-12x12mm-0.5mm	228	0.472	12.00	0.472	12.00	0.020	0.500	0.012	0.300		Flex Polyimide Tape	Perim eter 3	22x 22		0.038	0.97	198	
CABGA232-12x12mm-0.65mm	232	0.472	12.00	0.472	12.00	0.026	0.650	0.012	0.300	?	Flex Polyimide Tape	Perim eter 5,6	16X 16	N/A	0.041	1.05	198	
CABGA225-13x13mm-0.8mm	225	0.512	13.00	0.512	13.00	0.031	0.800	-	-		Flex Polyimide Tape	Full Array	15x 15		0.043	1.100	-	
CABGA192-14x14mm-0.8mm	192	0.551	14.00	0.551	14.00	0.031	0.800	0.018	0.460		Flex Polyimide Tape	Perim eter	16x 16		0.043	1.10	—	
CABGA220-14x14mm-0.8mm	220	0.551	14.00	0.551	14.00	0.031	0.800	0.018	0.460		Flex Polyimide Tape	Full Array	16x 16		0.043	1.10	—	
CABGA289-14x14mm-0.8mm	289	0.551	14.00	0.551	14.00	0.031	0.800	-	-		Flex Polyimide Tape				0.043	1.100	-	
CABGA196-15x15mm-1mm	196	0.591	15.00	0.591	15.00	0.039	1.000	0.018	0.460	?	Flex Polyimide Tape	Full Array	14x1 4	N/A	0.043	1.10	126	

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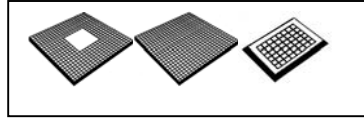
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Part Number System

3.5.11 CSBGA flexBGA/TABGA

3.5.12 CSBGA (FBGA/TBGA Flex/Tape) BGA Cont. 6		Length (L)		Width (W)		Pitch (P)		Ball Diameter		Diagram	Substrate Material	Ball Pattern	Outer Ball Matrix	CenterBall Matrix	Height (H)		Qty per Tray	Notes
Part Number	Balls	in	mm	in	mm	in	mm	in	mm						in	mm		
CABGA208-15x15mm- 0.8mm	208	0.591	15.00	0.591	15.00	0.031	0.800	0.018	0.460	17	Flex Polyimide Tape	Perim eter 4	17x1 7	N/A	0.043	1.10	126	
CABGA280-16x16mm- 0.8mm	280	0.630	16.00	0.630	16.00	0.031	0.800	0.018	0.460	18	Flex Polyimide Tape	Perim eter 5	19x1 9	N/A	0.043	1.10	119/ 126	
CABGA256-17x17mm- 1mm	256	0.669	17.00	0.669	17.00	0.039	1.000	0.018	0.460		Flex Polyimide Tape	Full Array	16x 16		0.071	1.80	90	
CABGA484-23x23mm- 1mm	484	0.906	23.00	0.906	23.00	0.039	1.000	0.018	0.460	?	Flex Polyimide Tape	Full Array	22x2 2	N/A	0.081	2.05	60	
CABGA412-27x27mm- 1mm	412	1.063	27.00	1.063	27.00	0.039	1.000	-	-		Flex Polyimide Tape				0.081	2.05	-	
CABGA672-27x27mm- 1mm	672	1.063	27.00	1.063	27.00	0.039	1.000	0.018	0.460	?	Flex Polyimide Tape	Full Array	26x2 6	N/A	0.081	2.05	40	

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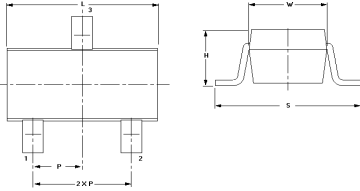
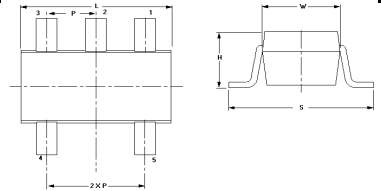
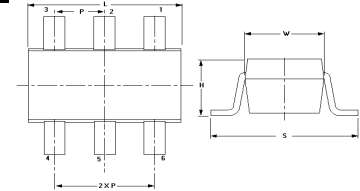
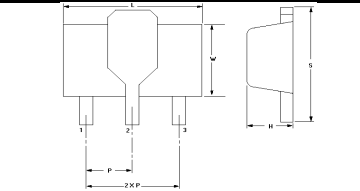
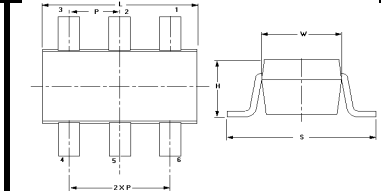
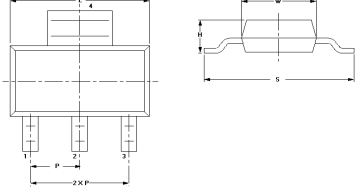
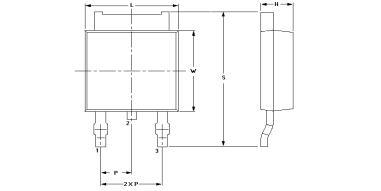
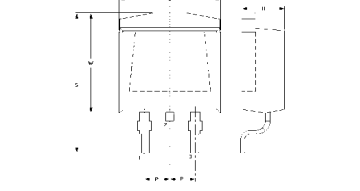
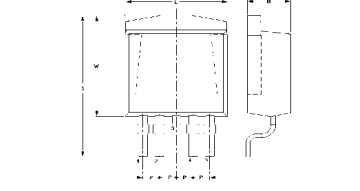
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3.6 SOT
Small Outline Transistor

 <p>Diagram 1</p>	 <p>Diagram 2</p>	 <p>Diagram 3</p>	 <p>Diagram 4</p>	 <p>Diagram 5</p>
 <p>Diagram 6</p>	 <p>Diagram 7</p>	 <p>Diagram 8</p>	 <p>Diagram 9</p>	<p>Diagram 10</p>
<p>Diagram 11</p>	<p>Diagram 12</p>	<p>Diagram 13</p>	<p>Diagram 14</p>	<p>Diagram 15</p>
<p>Diagram 16</p>	<p>Diagram 17</p>	<p>Diagram 18</p>	<p>Diagram 19</p>	<p>Diagram 20</p>

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3.6 SOT Small Outline Transistor

3.6 SOT Small Outline Transistor				Diagram	Leads	Length (L)		Width (W)		Total Width (S)		Pitch (P)		Height (H)		Tape Width		Tape Pitch		Qty Per Reel	Notes
Part Number	SOT	SC	TO			in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
LFAK	LFAK			18	5	0.201	5.100	0.156	3.950	0.240	6.1	0.050	1.270	0.044	1.107	-	-	-	-		
?	-	-	-	3		0.047	1.200	0.031	0.800	0.047	1.2	-	-	0.020	0.500	0.315	8.0	0.157	4.0	3,000	
SOT416	SOT416	SC75A/SC90	-	1	3	0.063	1.600	0.031	0.800	0.063	1.6	0.020	0.500	0.028	0.700	0.315	8.0	0.157	4.0	3,000	5
SC89		SC89		1	3	0.063	1.600	0.033	0.850	0.063	1.6	0.020	0.500	0.028	0.700	-	-	-	-		
D3PAK	D ³ PAK		TO268AA	8	3	0.063	1.600	0.551	14.000	0.740	18.8	0.215	5.460	0.185	4.700	-	-	-	-		
?				16	5	0.063	1.600	0.047	1.200	0.063	1.6	0.020	0.500	0.022	0.550	-	-	-	-		
?				17	6	0.063	1.600	0.047	1.200	0.063	1.6	0.020	0.500	0.022	0.550	-	-	-	-		
SOT323		SC70	-	1	3	0.079	2.000	0.049	1.250	0.083	2.1	0.026	0.650	0.035	0.900	0.315	8.0	0.157	4.0	3,000	
SOT323-Dupe?	SOT323	SC70	-	1	3	0.079	2.000	0.049	1.250	0.083	2.1	0.026	0.650	0.035	0.900	0.315	8.0	0.157	4.0	3,000	
CMPAK4	CMPAK4			14	4	0.079	2.000	0.049	1.250	0.083	2.1	0.045	1.15	0.035	0.900	0.315	8.0	0.157	4.0	3,000	
SC82AB		SC82AB		10	4	0.079	2.000	0.051	1.300	0.083	2.1	0.051	1.300	0.043	1.100	-	-	-	-		
SOT353	SOT353	SC88A	-	2	5	0.079	2.000	0.049	1.250	0.083	2.1	0.045	1.15	0.035	0.900	0.315	8.0	0.157	4.0	3,000	
?				15	5	0.079	2.000	0.049	1.250	0.083	2.1	0.038	.975	0.039	1.000	-	-	-	-		
SOT363	SOT363	SC88	-	3	6	0.079	2.000	0.049	1.250	0.083	2.1	0.026	0.650	0.035	0.900	0.315	8.0	0.157	4.0	3,000	
SOT23	SOT23	-	TO236AB	1	3	0.114	2.900	0.051	1.300	0.094	2.4	0.037	0.950	0.037	0.950	0.315	8.0	0.157	4.0	3,000	
SC96		SC96		1	3	0.114	2.900	0.059	1.500	0.110	2.8	0.037	0.950	0.043	1.100	-	-	-	-		
SOT323	SOT323	SC59	TO356AA	1	3	0.114	2.900	0.063	1.600	0.110	2.8	0.037	0.950	0.043	1.100	0.315	8.0	0.157	4.0	3,000	
SOT143	SOT143	-	TO253AA	5	4	0.114	2.900	0.063	1.600	0.110	2.8	0.067	1.7	0.037	0.950	0.315	8.0	0.157	4.0	3,000	
SC61B		SC61B		14	4	0.114	2.900	0.063	1.600	0.110	2.8	0.067	1.7	0.037	0.950	0.315	8.0	0.157	4.0	3,000	
SOT23-5	SOT23-5	SC74A	-	2	5	0.114	2.900	0.063	1.600	0.110	2.8	0.037	0.950	0.043	1.100	0.315	8.0	0.157	4.0	3,000	
SC95		SC95		4	6	0.114	2.900	0.059	1.500	0.110	2.8	0.037	0.950	0.043	1.100	-	-	-	-		
SOT23-6	SOT23-6	SC74	-	3	6	0.114	2.900	0.063	1.600	0.110	2.8	0.037	0.950	0.055	1.400	0.315	8.0	0.157	4.0	3,000	7
SOT23L	SOT23L			3	6	0.134	3.400	0.087	2.200	0.130	3.3	0.130	3.300	0.055	1.400	-	-	-	-		
?				11	8	0.160	4.060	0.005	0.130	0.007	0.2	0.038	0.953	0.040	1.020	-	-	-	-		
SOT89	SOT89	SC62	TO243AA	4	3	0.177	4.500	0.098	2.500	0.157	4.0	0.059	1.500	0.059	1.500	0.472	12.0	0.315	8.0	1,000	
SC84		SC84		4	3	0.224	5.700	0.142	3.600	0.213	5.4	0.083	2.100	0.059	1.500	-	-	-	-		1
SOT223	SOT223	SC73	TO261AA	6	3	0.256	6.500	0.142	3.600	0.276	7.0	0.091	2.300	0.063	1.600	0.472	12.0	0.315	8.0	1,000	
DPAK	DPAK	SC63	TO252AA	7	3	0.256	6.500	0.236	6.000	0.394	10.0	0.090	2.285	0.091	2.300	0.630	16.0	0.315	8.0	2,500	
?				12	5	0.256	6.500	0.140	3.560	0.274	7.0	0.059	1.500	0.063	1.600	-	-	-	-		
D2PAK	D ² PAK		TO263AB	8	3	0.394	10.000	0.362	9.200	0.591	15.0	0.100	2.540	0.173	4.400	0.945	24.0	0.472	12.0	800 / 1,000	
D2PAK-5	D ² PAK-5 PIN			9	5	0.394	10.000	0.374	9.500	0.579	14.7	0.067	1.700	0.180	4.572	-	-	-	-		
?				13	7	0.394	10.000	0.433	11.000	0.602	15.3	0.050	1.270	0.169	4.300	-	-	-	-		
?				37	3	0.398	10.100	0.346	8.800	0.516	13.1	0.100	2.540	0.177	4.500	-	-	-	-		

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Diagram

3.7 SOD

Small Outline Diode



3.7 SOD Small Outline Diode					Diagram	Length (L)		Width (W)		Total Width (S)		Lead Width (B)		Height (H)		Tape Width		Tape Pitch		Qty Per Reel	Notes
Part Number	SOD	SC	SM	DO		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
GULL WING LEAD																					
SOD523	SOD523	SC79			1	0.047	1.20	0.031	0.80	0.063	1.60	0.012	0.30	0.024	0.60	0.315	8	0.157	4.0	3,000	
SOD323	SOD323	SC76			1	0.067	1.70	0.049	1.25	0.098	2.50	0.012	0.30	0.028	0.70	0.315	8	0.157	4.0	3,000	
SOD123	SOD123				1	0.106	2.70	0.059	1.50	0.142	3.60	0.028	0.70	0.051	1.30	0.315	8	0.157	4.0	3,000	
SMA			SMA	DO215AC	1	0.169	4.30	0.102	2.60	0.240	6.10	0.055	1.40	0.087	2.20	0.472	12	0.157	4.0	1,800	
SMB			SMB	DO215AA	1	0.169	4.30	0.142	3.60	0.244	6.20	0.079	2.00	0.091	2.30	0.472	12	0.315	8.0	1,000	
SMC			SMC	DO215AB	1	0.276	7.00	0.236	6.00	0.394	10.00	0.118	3.00	0.091	2.30	0.630	16	0.315	8.0	900	
C-BEND LEAD (MODIFIED J-LEAD)																					
SMAJ	SOD106 / SOD124		SMAJ	DO214AC	2	0.169	4.30	0.102	2.60	0.197	5.00	0.059	1.50	0.087	2.20	0.472	12	0.157	4.0	1,500	
SMBJ			SMBJ	DO214AA	2	0.169	4.30	0.142	3.60	0.213	5.40	0.079	2.00	0.091	2.30	0.472	12	0.315	8.0	750	
SMCJ			SMCJ	DO214AB	2	0.276	7.00	0.236	6.00	0.315	8.00	0.118	3.00	0.091	2.30	0.630	16	0.315	8.0	750	
Cylindrical Body																					
LL34	SOD80			DO213AA	3	0.134	3.40	0.055	1.40	0.134	3.40	NA	NA	NA	NA	0.315	8	0.157	4.0	10,000	
LL41			SM1	DO213AB	3	0.098	2.50	0.197	5.00	0.197	5.00	NA	NA	NA	NA	0.472	12	0.157	4.0	5,000	
End Cap Contacts																					
SOD110	SOD110				4	0.079	2.00	0.049	1.25	0.049	1.25	NA	NA	0.063	1.60	-	-	-	-		

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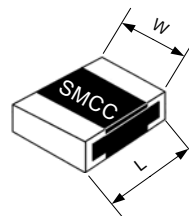
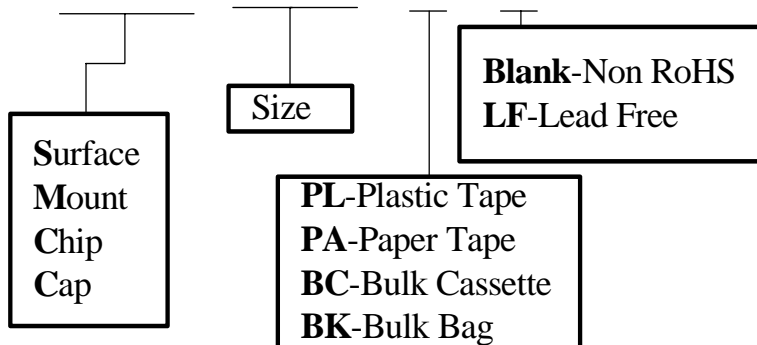
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Part Number Information:

SMCC0402in-PL-LF



Part Number	Size Code		Body Size (W x L)		Tape Width		Tape Pitch		Package Quantity	
	inch	(metric)	in	(mm)	in	(mm)	in	(mm)	Reel	Cassette
SMCC01005in	01005	(0402)	0.01 x 0.005	(0.4 x 0.2)	0.31	(8.0)	0.08	(2.0)	15K,20K	
SMCC0202in	0202	(0404)	0.02 x 0.02	(0.5 x 0.5)						
SMCC0201in	0201	(0603)	0.02 x 0.01	(0.6 x 0.3)	0.31	(8.0)	0.08	(2.0)	10K,15K,50K	
SMCC0303in	0303	(0808)	0.03 x 0.03	(0.8 x 0.8)						
SMCC0402in	0402	(1005)	0.04 x 0.02	(1.0 x 0.5)	0.31	(8.0)	0.16	(4.0)	10K,50K	10K,50K
SMCC0504in	0504	(1210)	0.05 x 0.04	(1.2 x 1.0)	0.31	(8.0)			5K	
SMCC0505in	0505	(1212)	0.05 x 0.05	(1.2 x 1.2)					3K	
SMCC0603in	0603	(1608)	0.06 x 0.03	(1.6 x 0.8)	0.31	(8.0)	0.16	(4.0)	4K,10K	15K
SMCC0805in	0805	(2012)	0.08 x 0.05	(2.0 x 1.2)	0.31	(8.0)	0.16	(4.0)	3K,4K,10K	10K
SMCC1111in	1111	(2828)	0.11 x 0.11	(2.8 x 2.8)						
SMCC1206in	1206	(3216)	0.12 x 0.06	(3.2 x 1.6)	0.31	(8.0)	0.16	(4.0)	2K,3K,4K,10K,6K	
SMCC1210in	1210	(3225)	0.12 x 0.10	(3.2 x 2.5)	0.31	(8.0)	0.16	(4.0)	3K,4K,8K,10K	
SMCC1805in	1805	(4512)	0.18 x 0.05	(4.5 x 1.2)	0.31	(8.0)			1K	
SMCC1808in	1808	(4520)	0.18 x 0.08	(4.5 x 2.0)	0.31	(8.0)			1K	
SMCC1812in	1812	(4532)	0.18 x 0.12	(4.5 x 3.0)	0.47	(12.0)	0.31	(8.0)	500,1K,4K,5K	
SMCC1825in	1825	(4564)	0.18 x 0.25	(4.5 x 6.4)	0.47	(12.0)	0.31	(8.0)	1K	
SMCC2225in	2225	(5664)	0.22 x 0.25	(5.6 x 6.4)	0.31	(8.0)			1K	
SMCC2211in	2211	(5728)	0.22 x 0.11	(5.7 x 2.8)						
SMCC2220in	2220	(5750)	0.22 x 0.20	(5.7 x 5.0)	0.47	(12.0)	0.31	(8.0)	1K,1.5K,2K,4K,5K	



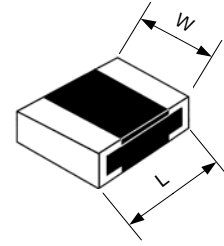
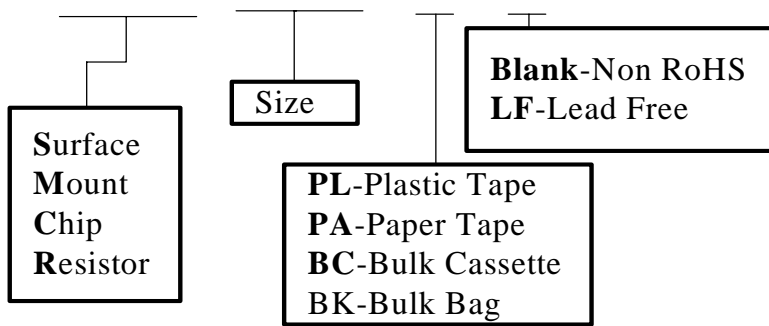
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Part Number Information:

3.9.1 SMCR Surface Mount Chip Resistors

SMCR0402in-PL-LF



Part Number	Size Code		Body Size (W x L)		Tape Width		Tape Pitch		Package Quantity	
	inch	(metric)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	Reel	Cassette
SMCR01005in	01005	(0402)	0.01 x 0.005	(0.4 x 0.2)	0.31	(8.0)	0.08	(2.0)		
SMCR0101in	0101	(0303)	0.01 x 0.01	(0.3 x 0.3)						
SMCR0201in	0201	(0603)	.020 x 0.01	(0.5 x 0.3)	0.31	(8.0)	0.08	(2.0)	10K	50K
SMCR0302in	0302	(0805)	0.03 x 0.02	(0.762 x 0.5)					400	5K
SMCR0303in	0303	(0808)	0.03 x 0.03	(0.762 x 0.8)					400	5K
SMCR0402in	0402	(1005)	0.039 x 0.020	(1.00 x 0.50)	0.31	(8.0)	0.08	(2.0)	10K	50K,80K
SMCR0404in	0404	(0909)	0.035 x 0.035	(0.89 x 0.89)					400	5K
SMCR0502in	0502	(1206)	0.05 x 0.025	(1.27 x 0.64)					5K	5K
SMCR0504in	0504	(1210)	0.05 x 0.04	(1.27 x 1.0)					5K	5K
SMCR0505in	0505	(1212)	0.05 x 0.050	(1.27 x 1.27)					5K	5K
SMCR0603in	0603	(1608)	0.063 x 0.031	(1.60 x 0.80)	0.31	(8.0)	0.16	(4.0)	5K	25K
SMCR0705in	0705	(1912)	0.075 x 0.050	(1.91 x 1.27)					5K	5K
SMCR0805in	0805	(2012)	0.079 x 0.049	(2.00 x 1.25)	0.31	(8.0)	0.16	(4.0)	5K	10K
SMCR1005in	1005	(2512)	0.1 x 0.050	(2.54 x 1.27)						
SMCR1010in	1010	(2525)	0.1 x 0.10	(2.54 x 2.5)					5K	5K
SMCR1206in	1206	(3216)	0.122 x 0.061	(3.10 x 1.55)	0.31	(8.0)	0.16	(4.0)	5K	5K
SMCR1210in	1210	(3225)	0.12 x 0.10	(3.2 x 2.5)	0.31	(8.0)	0.16	(4.0)		N/A
SMCR1505in	1505	(3812)	0.15 x 0.050	(3.81 x 1.27)					5K	5K
SMCR1812in	1812	(3246)	0.181 x 0.126	(4.60 x 3.20)						
SMCR2010in	2010	(5025)	0.2 x 0.10	(5.0 x 2.5)	0.47	(12.0)	0.16	(4.0)	4K	N/A
SMCR2208in	2208	(5719)	0.225 x 0.075	(5.72 x 1.91)					5K	5K
SMCR2512in	2512	(6432)	0.25 x 0.12	(6.4 x 3.0)	0.47	(12.0)	0.16	(4.0)	4K	N/A



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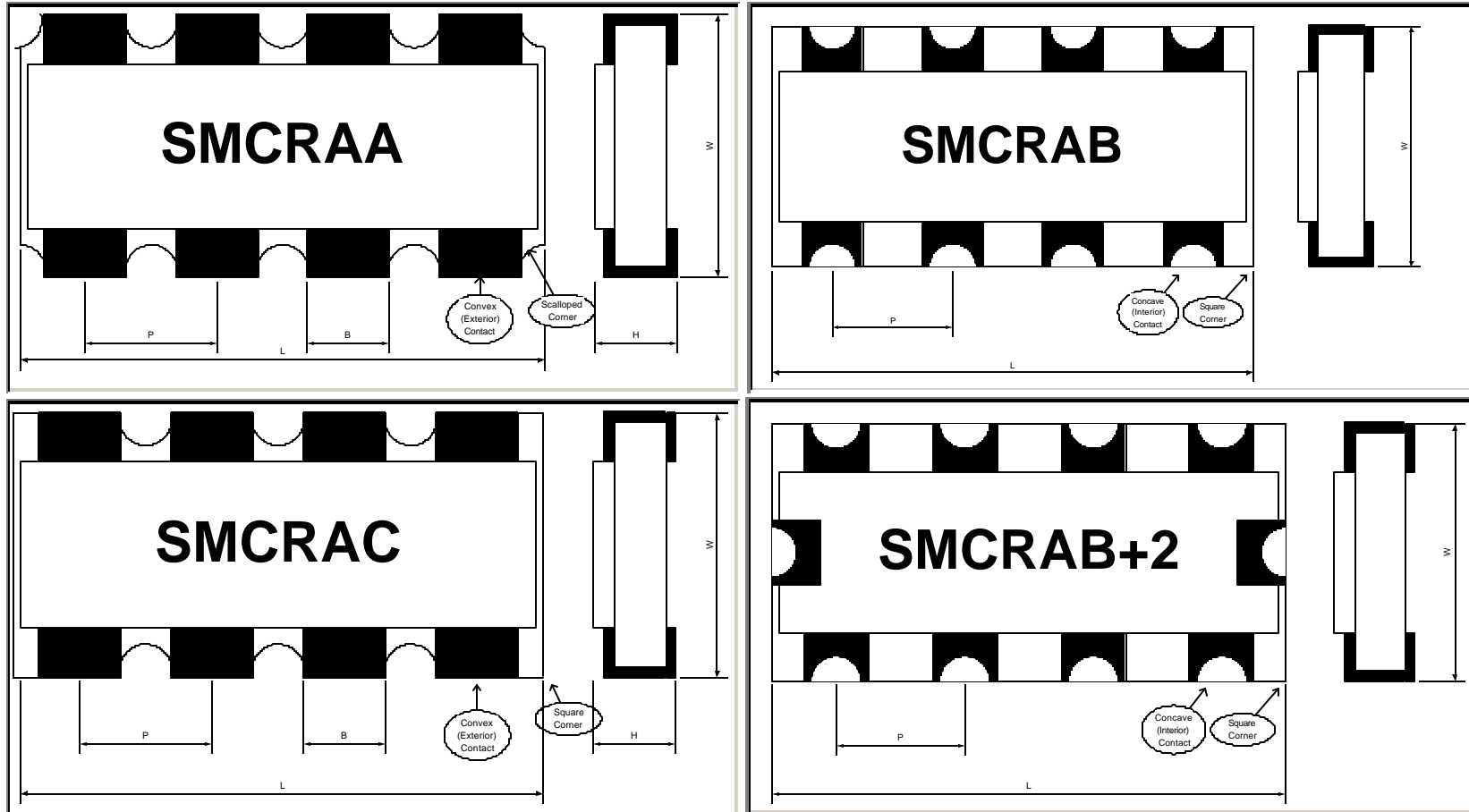
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Part Information-Diagrams

**3.9.3 SMCRA
Surface Mount Chip Resistor Array**

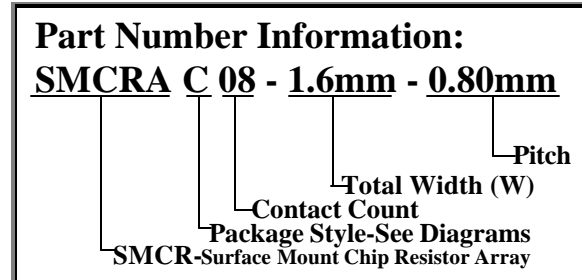


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3.9.3 SMCRA Surface Mount Chip Resistor Array

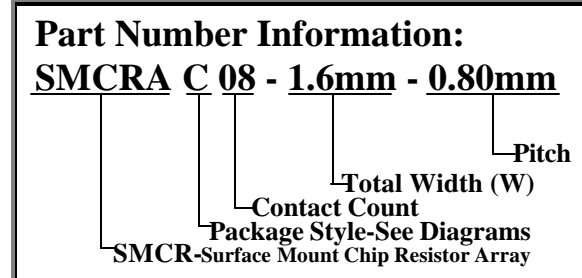


Part Number	Diagram	Leads		Body Length (L)	Body Width (W)	Lead Width (B)	Pitch (P)	Height (H)	Tape Width	Tape Pitch	Qty Per Reel	Notes
SMCRAC04-1.0mm-0.65mm	SMCRAC	4	in	0.039	0.039	0.013	0.026	0.014	0.31	0.08	10K/40K	Square Convex (Exterior)
			mm	1.00	1.00	0.33	0.65	0.35	8.0	2.0		
SMCRAC04-1.6mm-0.80mm	SMCRAC	4	in	0.063	0.063	0.024	0.031	0.014	0.31	0.16	5K	Square Convex (Exterior)
			mm	1.60	1.60	0.60	0.80	0.35	8.0	4.0		
SMCRAC04-3.1mm-1.27mm	SMCRAC	4	in	0.102	0.122	0.039	0.050	0.022	0.31	0.16	4K	Square Convex (Exterior)
			mm	2.60	3.10	1.00	1.27	0.55	8.0	4.0		
SMCRAB04-1.6mm-0.80mm	SMCRAB	4	in	0.063	0.063	0.012	0.031	0.024	0.31	0.16	5K/10K	Square Concave (Interior)
			mm	1.60	1.60	0.30	0.80	0.60	8.0	4.0		
SMCRAC04-0.6mm-0.50mm	SMCRAC	4	in	0.031	0.024	0.014	0.020	0.014	0.31	0.08	10K	Square Convex (Exterior)
			mm	0.80	0.60	0.35	0.50	0.35	8.0	2.0		
SMCRAA04-1.6MM-0.80MM	SMCRAA	4	in	0.063	0.063		0.031		0.31	0.16	5K	Scalloped Convex (Exterior)
			mm	1.6	1.6		0.8	0.5	8.0	4.0		

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3.9.3 SMCRA Surface Mount Chip Resistor Array



Part Number	Diagram	Leads		Body Length (L)	Body Width (W)	Lead Width (B)	Pitch (P)	Height (H)	Tape Width	Tape Pitch	Qty Per Reel	Notes
SMCRAB04-2.2mm-1.27mm	SMCRAB	4	in	.1	0.09	0.031	0.050	0.024				Square Concave (Interior)
			mm	2.54	2.2	0.80	1.27	0.60				
SMCRAB04-3.1mm-1.27mm	SMCRAB	4	in	0.1	0.122	0.031	0.050	0.024				Square Concave (Interior)
			mm	2.54	3.1	0.80	1.27	0.60				
SMCRAB08-2.2mm-1.27mm	SMCRAB	8	in	0.200	0.087	0.028	0.050	0.028	0.47	0.16	2.5K	Square Concave (Interior)
			mm	5.08	2.20	0.70	1.27	0.70	12.0	4.0		
SMCRAC08-3.1mm-1.27mm	SMCRAC	8	in	0.205	0.122	0.030	0.050	0.022	0.47	0.16	4K	Square Convex (Exterior)
			mm	5.20	3.10	0.80	1.27	0.55	12.0	4.0		
SMCRAB08-1.0mm-0.50mm	SMCRAB	8	in	0.079	0.039	0.010	0.020	0.016	0.31	0.08	10K	Square Concave (Interior)
			mm	2.00	1.00	0.25	0.50	0.40	8.0	2.0		
SMCRAC08-1.0mm-0.50mm	SMCRAC	8	in	0.079	0.039	0.012	0.020	0.014	0.31	0.08	10K/40K	Square Convex (Exterior)
			mm	2.00	1.00	0.30	0.50	0.35	8.0	2.0		

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3.9.3 SMCRA

Surface Mount Chip Resistor Array

Part Number Information:
SMCRA C 08 - 1.6mm - 0.80mm

SMCRA - Surface Mount Chip Resistor Array
 C - Contact Count
 08 - Total Width (W)
 1.6mm - Pitch

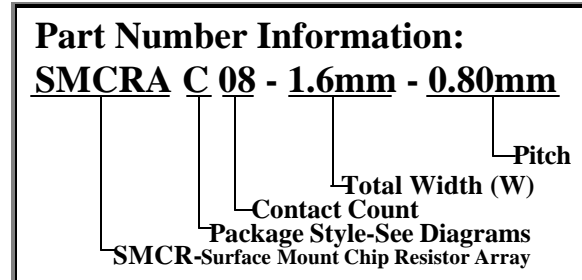
Part Number	Diagram	Leads		Body Length (L)	Body Width (W)	Lead Width (B)	Pitch (P)	Height (H)	Tape Width	Tape Pitch	Qty Per Reel	Notes
SMCRAB08-1.6mm-0.80mm	SMCRAB	8	in	0.126	0.063	0.016	0.031	0.024	0.31	0.16	5K/20K	Square Concave (Interior)
			mm	3.20	1.60	0.40	0.80	0.60	8.0	4.0		
SMCRAA08-1.6mm-0.80mm	SMCRAA	8	in	0.126	0.063	0.020	0.031	0.020	0.31	0.16	5K/20K	Scalloped Convex (Exterior)
			mm	3.20	1.60	0.50	0.80	0.50	8.0	4.0		
SMCRAC08-1.6mm-0.80mm	SMCRAC	8	in	0.126	0.063	0.020	0.031	0.020	0.31	0.16	5K/10K/20K	Square Convex (Exterior)
			mm	3.20	1.60	0.50	0.80	0.50	8.0	4.0		
SMCRAA08-3.1mm-1.27mm	SMCRAA	8	in	0.210	0.122	0.030	0.050	0.022			4K/16K	Scalloped Convex (Exterior)
			mm	5.34	3.10	0.80	1.27	0.55				
SMCRAB08-3.1mm-1.27mm	SMCRAB	8	in	0.210	0.122	0.030	0.050	0.022	0.472	0.31	4K/16K	Square Concave (Interior)
			mm	5.34	3.10	0.80	1.27	0.55	12.0	8.0		
SMCRAB08+2-2.1mm-0.80mm	SMCRAB+2	10	in	0.157	0.083	0.0200	0.031	0.024	0.47		4K/16K	Square Concave (Interior)-Contacts
			mm	4.00	2.10	0.50	0.80	0.60	12.0			

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3.9.3 SMCRA Surface Mount Chip Resistor Array

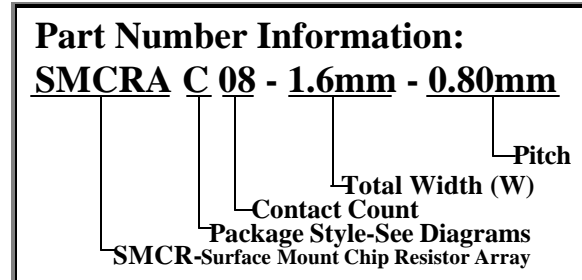


Part Number	Diagram	Leads		Body Length (L)	Body Width (W)	Lead Width (B)	Pitch (P)	Height (H)	Tape Width	Tape Pitch	Qty Per Reel	Notes
SMCRAC10-3.2mm-1.27mm	SMCRAC	10	in	0.252	0.126	0.041	0.050	0.022	0.31	0.16	4K	Square Convex (Exterior)
			mm	6.40	3.20	1.05	1.27	0.55	8.0	4.0		
SMCRAC10-1.6mm-0.64mm	SMCRAC	10	in	0.252	0.122	0.032	0.050	0.022	0.47	0.16	4K	Square Convex (Exterior)
			mm	6.40	3.10	0.80	1.27	0.55	12.0	4.0		
SMCRAC10-1.6mm-0.64mm	SMCRAC	10	in	0.126	0.063	0.013	0.025	0.020	0.31	0.16	5K	Square Convex (Exterior)
			mm	3.20	1.60	0.32	0.64	0.50	8.0	4.0		
SMCRAB8+2-1.6MM-0.64MM	SMCRAB8-	10	in	0.126	0.063	0.013	0.025	0.026			4K	Square Concave (Interior)-Contacts
			mm	3.20	1.60	0.33	0.64	0.65				
SMCRAB16-2.2mm-1.27mm	SMCRAB	16	in	0.400	0.09	0.031	0.050	0.024				Square Concave (Interior)
			mm	10.16	2.2	0.80	1.27	0.60				
SMCRAC16-1.6mm-0.50mm	SCMRAC	16	in	0.150	0.063	0.012	0.020	0.018	0.31	0.16	5K	Square Convex (Exterior)
			mm	3.80	1.60	0.30	0.50	0.45	8.0	4.0		

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3.9.3 SMCRA Surface Mount Chip Resistor Array



Part Number	Diagram	Leads		Body Length (L)	Body Width (W)	Lead Width (B)	Pitch (P)	Height (H)	Tape Width	Tape Pitch	Qty Per Reel	Notes
SMCRAB16-3.1mm-1.27mm	SMCRAB	16	in	0.4	0.122	0.031	0.050	0.024				Square Concave (Interior)
			mm	10.16	3.1	0.80	1.27	0.60				
SMCRAC16-3.1mm-0.5mm	SMCRAC	16	in	0.150	0.063	0.012	0.02	0.018	0.31	0.16	5K	Square Convex (Exterior)
			mm	3.80	1.60	0.30	0.5	0.45	8.0	4.0		
SMCRAB16-1.6mm-0.80mm	SMCRAB	16	in	0.252	0.063	0.020	0.031	0.024	0.31	0.16	4K	Square Concave (Interior)
			mm	6.40	1.60	0.50	0.80	0.60	8.0	4.0		
SMCRAC16-3.1mm-0.64mm	SMCRAC	16	in	0.252	0.122	0.032	.025	0.022			4K/16K	Square Convex (Exterior)
			mm	6.40	3.10	0.80	0.64	0.55				
SMCRAB16-3.1mm-0.64mm	SMCRAB	16	in	0.252	0.122	0.028	0.025	0.024			4K/16K	Square Concave (Interior)
			mm	6.40	3.10	0.70	0.64	0.60				
SMCRAC16-1.6mm-0.64mm	SMCRAC	16	in	0.126	0.063	0.014	0.025	0.020			5K/20K	Square Convex (Exterior)
			mm	3.20	1.60	0.36	0.64	0.50				

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Chip Resistor Array Cross Reference to Search Part Number

Package	CO_NAME	Search Part Number
BCN102 (1.0mm)	BI Technologies	SMCRAC04-1.0mm-0.65mm
BCN104 (1.0mm)	BI Technologies	SMCRAC08-1.0mm-0.50mm
BCN164A (1.6mm)	BI Technologies	SMCRAA08-1.6mm-0.80mm
BCN164AB (1.6mm)	BI Technologies	SMCRAC08-1.6mm-0.80mm
BCN164ABI (1.6mm)	BI Technologies	SMCRAB08-1.6mm-0.80mm
BCN168RB (1.6mm)	BI Technologies	SMCRAC16-1.6mm-0.64mm
BCN168SB (1.6mm)	BI Technologies	SMCRAC16-1.6mm-0.64mm
BCN2?	BI Technologies	SMCRAC04-1.6mm-0.80mm
BCN21 (2.1mm)	BI Technologies	SMCRAB08+2-2.1mm-0.80mm
BCN318RB (3.1mm)	BI Technologies	SMCRAC16-3.1mm-0.64mm
BCN318RBI (3.1mm)	BI Technologies	SMCRAB16-3.1mm-0.64mm
BCN318SB (3.1mm)	BI Technologies	SMCRAC16-3.1mm-0.64mm
BCN318SBI (3.1mm)	BI Technologies	SMCRAB16-3.1mm-0.64mm
BCN31L	BI Technologies	SMCRAC10-1.6mm-0.64mm
BCN4D (3.1mm)	BI Technologies	SMCRAA08-3.1mm-1.27mm
BCN4DBI (3.1mm)	BI Technologies	SMCRAB08-3.1mm-1.27mm
CAT10	Bourns	SMCRAB08-1.0mm-0.50mm
CAT16-F4	Bourns	SMCRAB08-1.6mm-0.80mm
CAT16-J2	Bourns	SMCRAB04-1.6mm-0.80mm
CAT16-J4	Bourns	SMCRAB08-1.6mm-0.80mm
CAT16-LV4F12	Bourns	SMCRAB16-1.6mm-0.80mm
CAT16-PC2F6	Bourns	SMCRAB08-1.6mm-0.80mm
CAT16-PC4F12	Bourns	SMCRAB16-1.6mm-0.80mm
CAT16-PT2F2	Bourns	SMCRAB08-1.6mm-0.80mm
CAT16-PT4F4	Bourns	SMCRAB16-1.6mm-0.80mm
CAY10-J2	Bourns	SMCRAC04-1.0mm-0.65mm
CAY10-J4	Bourns	SMCRAC08-1.0mm-0.50mm
CAY16-F4	Bourns	SMCRAC08-1.6mm-0.80mm
CAY16-J2	Bourns	SMCRAC04-1.6mm-0.80mm
CAY16-J4	Bourns	SMCRAC08-1.6mm-0.80mm
CAY17	Bourns	SMCRAC10-1.6mm-0.64mm
CN1E2	KOA Speer	SMCRAC04-1.0mm-0.65mm
CN1E4	KOA Speer	SMCRAC08-1.6mm-0.80mm
CN1J2	KOA Speer	SMCRAB04-1.6mm-0.80mm
CN1J4	KOA Speer	SMCRAB08-1.6mm-0.80mm
CN1J8	Kyocera	SMCRAB16-1.6mm-0.80mm
CN2A2	KOA Speer	SMCRAB04-2.2mm-1.27mm
CN2A4	Kyocera	SMCRAB08-2.2mm-1.27mm
CN2A8	KOA Speer	SMCRAB16-2.2mm-1.27mm


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Chip Resistor Array Cross Reference to Search Part Number

Package	CO_NAME	Search Part Number
CN2B2	KOA Speer	SMCRAB04-3.1mm-1.27mm
CN2B4	KOA Speer	SMCRAB08-3.1mm-1.27mm
CN2B8	KOA Speer	SMCRAB16-3.1mm-1.27mm
CR1J10	KOA Speer	SMCRAB8+2-1.6MM-0.64MM
CR2A10	KOA Speer	SMCRAB08+2-2.1mm-0.80mm
CRA3A4E	AVX	SMCRAA08-1.6mm-0.80mm
CRA3A4E	Kyocera	SMCRAA08-1.6mm-0.80mm
CRB1A2E	AVX	SMCRAB04-1.6mm-0.80mm
CRB2A4E	AVX	SMCRAB08-1.0mm-0.50mm
CRB2A4E	Kyocera	SMCRAB08-1.0mm-0.50mm
CRB3A4E	AVX	SMCRAB08-1.6mm-0.80mm
CRB3A4E	Kyocera	SMCRAB08-1.6mm-0.80mm
CRB6A8E	AVX	SMCRAB16-1.6mm-0.80mm
CRB6A8E	Kyocera	SMCRAB16-1.6mm-0.80mm
CRC11A	AVX	SMCRAC04-1.0mm-0.65mm
CRC2A4E	AVX	SMCRAC08-1.0mm-0.50mm
CRC2A4E	Kyocera	SMCRAC08-1.0mm-0.50mm
CRC3A4E	AVX	SMCRAC08-1.6mm-0.80mm
CRC3A4E	Kyocera	SMCRAC08-1.6mm-0.80mm
CRC4A8E	AVX	SMCRAC16-3.1mm-0.5mm
CRC4A8E	Kyocera	SMCRAC16-3.1mm-0.5mm
EXB14V	Panasonic	SMCRAC04-0.6mm-0.50mm
EXB24V	Panasonic	SMCRAC04-1.0mm-0.65mm
EXB28V	Panasonic	SMCRAC08-1.0mm-0.50mm
EXB2HV	Panasonic	SMCRAC16-1.6mm-0.50mm
EXB34V	Panasonic	SMCRAC04-1.6mm-0.80mm
EXB38V	Panasonic	SMCRAC08-1.6mm-0.80mm
EXBS8V	Panasonic	SMCRAB08-2.2mm-1.27mm
EXBV4V	Panasonic	SMCRAB04-1.6mm-0.80mm
EXBV8V	Panasonic	SMCRAB08-1.6mm-0.80mm
MNR02	ROHM	SMCRAC04-1.0mm-0.65mm
MNR04	ROHM	SMCRAC08-1.0mm-0.50mm
MNR12	ROHM	SMCRAC04-1.6mm-0.80mm
MNR14	ROHM	SMCRAC08-1.6mm-0.80mm
MNR15	ROHM	SMCRAC10-1.6mm-0.64mm
MNR18	ROHM	SMCRAC16-3.1mm-0.5mm
MNR32	ROHM	SMCRAC04-3.1mm-1.27mm
MNR34	ROHM	SMCRAC08-3.1mm-1.27mm
MNR35	ROHM	SMCRAC10-1.6mm-0.64mm



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Package	CO_NAME	Search Part Number
RAC102DC	Kamaya	SMCRAC04-1.0mm-0.65mm
RAC104DC	Kamaya	SMCRAC08-1.0mm-0.50mm
RAC162DA	Kamaya	SMCRAA04-1.6MM-0.80MM
RAC164DA	Kamaya	SMCRAA08-1.6mm-0.80mm
RAC164DB	Kamaya	SMCRAB08-1.6mm-0.80mm
RAC164DC	Kamaya	SMCRAC08-1.6mm-0.80mm
RAC324DA	Kamaya	SMCRAA08-3.1mm-1.27mm
RC6	BI Technologies	SMCRAC10-3.2mm-1.27mm
SRA0603X4P4A	TopLine	SMCRAC08-1.6mm-0.80mm
SRA0603X4P7A	TopLine	SMCRAC08-1.6mm-0.80mm
SRA0805X4P7A	TopLine	SMCRAB08-2.2mm-1.27mm
SRA1206X4E4A	TopLine	SMCRAA08-3.1mm-1.27mm
SRA1206X4E7A	TopLine	SMCRAA08-3.1mm-1.27mm



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Diagram

Picture

**3.13 FP
Flat Packs**

Part Number System

3.13 FP-Flat Pack (CERPack)		Length (L)		Width (W)		Pitch (P)		Height (H)		Foot Print (FP)		Qty per Tube	Notes
Part Number	Leads	in	mm	in	mm	in	mm	in	mm	in	mm		
		FP14-0.2475in-0.05in	14	0.36	9.21	0.248	6.29	0.050	1.27	0.063	1.59		
FP16-0.265in-0.05in	16	0.400	10.16	0.265	6.73	0.050	1.27	0.070	1.78	0.620	15.75	-	
FP20-0.2725in-0.05in	20	0.515	13.08	0.273	6.92	0.050	1.27	0.073	1.84	0.455	11.56	-	
FP24-0.3575in-0.05in	24	0.565	14.35	0.358	9.08	0.050	1.27	0.068	1.71	0.620	15.75	-	
FP48-0.38in-0.025in	48	0.625	15.88	0.380	9.65	0.025	0.64	0.098	2.48	0.620	15.75	-	
FP56-0.38in-0.025in	56	0.725	18.42	0.380	9.65	0.025	0.64	0.098	2.48	0.620	15.75	-	

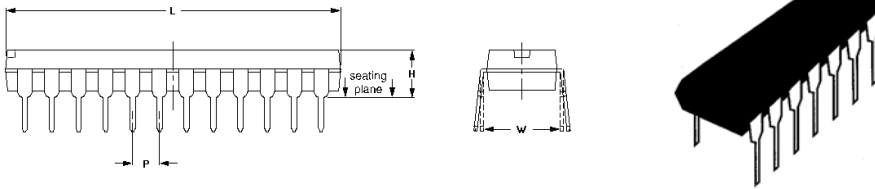
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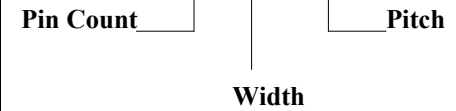
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4.1 Dip Dual Inline Package



Part Number Information:

SOIC14-0.15in-0.05in



4.1 DIP 1		Length (L)		Lead Spread(W)		Pitch (P)		Height (H)		Qty per Tube	Notes
Part Number	Leads	in	mm	in	mm	in	mm	in	mm		
DIP2-0.3in-0.1in	2	0.100	2.540	0.300	7.620	0.100	2.540	0.135	3.429	200	
DIP4-0.3in-0.1in	4	-	-	0.300	7.620	0.100	2.540	-	-		
DIP8-0.3in-0.1in	8	0.360	9.144	0.300	7.620	0.100	2.540	0.200	5.080	50	
DIP6-0.3in-0.1in	6	-	-	0.300	7.620	0.100	2.540	-	-		
DIP14-0.3in-0.1in	14	0.760	19.304	0.300	7.620	0.100	2.540	0.200	5.080	25	
DIP16-0.3in-0.1in	16	0.760	19.304	0.300	7.620	0.100	2.540	0.200	5.080	25	
DIP18-0.3in-0.1in	18	0.890	22.606	0.300	7.620	0.100	2.540	0.200	5.080	21	
DIP20-0.3in-0.1in	20	0.960	24.384	0.300	7.620	0.100	2.540	0.200	5.080	18	
DIP20-0.4in-0.1in	20	1.100	27.940	0.400	10.160	0.100	2.540	0.225	5.720		
DIP22-0.3in-0.1in	22	1.100	27.940	0.300	7.620	0.100	2.540	0.020	0.508		
DIP22-0.4in-0.1in	22	1.100	27.940	0.400	10.160	0.100	2.540	0.200	5.080		
DIP24-0.3in-0.1in	24	1.250	31.750	0.300	7.620	0.100	2.540	0.200	5.080	15	
DIP24-0.4in-0.1in	24	1.200	30.480	0.400	10.160	0.100	2.540	0.200	5.080		

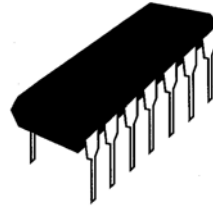
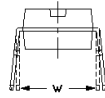
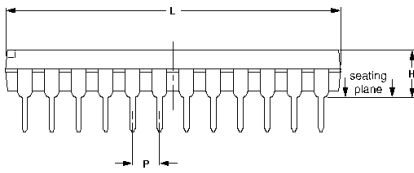
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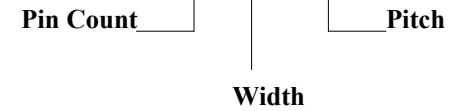
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4.1 Dip Dual Inline Package



Part Number Information:

SOIC14-0.15in-0.05in



4.1 DIP Cont 2		Length (L)		Lead Spread(W)		Pitch (P)		Height (H)		Qty per Tube	Notes
Part Number	Leads	in	mm	in	mm	in	mm	in	mm		
DIP24-0.6in-0.1in	24	1.250	31.750	0.600	15.240	0.100	2.540	0.200	5.080	15	
DIP28-0.3in-0.1in	28	1.250	31.750	0.300	7.620	0.100	2.540	0.200	5.080	14	
DIP28-0.4in-0.1in	28	1.400	35.560	0.400	10.160	0.100	2.540	0.225	5.720	-	
DIP28-0.6in-0.1in	28	1.450	36.830	0.600	15.240	0.100	2.540	0.200	5.080	13	
DIP32-0.3in-0.1in	32	1.600	40.640	0.300	7.620	0.100	2.540	0.200	5.080		
DIP32-0.6in-0.1in	32	1.650	41.910	0.600	15.240	0.100	2.540	0.200	5.080	11	
DIP40-0.6in-0.1in	40	2.050	52.070	0.600	15.240	0.100	2.540	0.200	5.080	9	
DIP42-0.6in-0.1in	42	2.200	55.880	0.600	15.240	0.100	2.540	0.225	5.720		
DIP48-0.6in-0.1in	48	2.400	60.960	0.600	15.240	0.100	2.540	0.200	5.080	9	
DIP50-0.9in-0.1in	50	2.500	63.500	0.900	22.860	0.100	2.540	0.200	5.080		
DIP52-0.6in-0.1in	52		-	0.600	15.240	0.100	2.540	-	-		
DIP56-0.6in-0.1in	56		-	0.600	15.240	0.100	2.540	-	-		
DIP64-0.9in-0.1in	64		-	0.900	22.860	0.100	2.540	-	-		

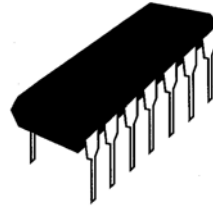
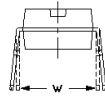
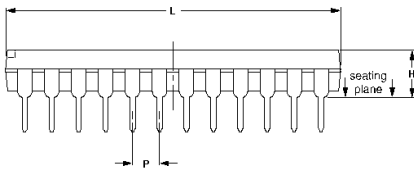
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4.1 Dip Dual Inline Package



Part Number Information:

SOIC14-0.15in-0.05in

Pin Count Width Pitch

4.1 DIP Cont 3		Length (L)		Lead Spread(W)		Pitch (P)		Height (H)		Qty per Tube	Notes
Part Number	Leads	in	mm	in	mm	in	mm	in	mm		
DIP68-0.9in-0.1in	68		-	0.900	22.860	0.100	2.540	-	-	-	
SDIP14-0.3in-0.07in	14	0.634	16.100	0.300	7.620	0.070	1.778	0.200	5.080		
SDIP18-0.3in-0.07in	18	0.770	19.570	0.300	7.620	0.070	1.778	0.200	5.080		
SDIP20-0.3in-0.07in	20	0.770	19.570	0.300	7.620	0.070	1.778	0.200	5.080		
SDIP22-0.3in-0.07in	22	0.910	23.120	0.300	7.620	0.070	1.778	0.200	5.080		
SDIP24-0.3in-0.07in	24	0.864	21.950	0.300	7.620	0.070	1.778	0.200	5.080		
SDIP28-0.4in-0.07in	28	1.120	28.460	0.400	10.160	0.070	1.778	0.200	5.080		
SDIP28-0.4in-0.07in	28	1.120	28.460	0.400	10.160	0.070	1.778	0.200	5.080		
SDIP30-0.4in-0.07in	30	1.10	27.813	0.400	10.160	0.070	1.778	0.200	5.080	20	
SDIP32-0.4in-0.07in	32	1.102	28.000	0.400	10.160	0.070	1.778	0.185	4.700		
SDIP40-0.6in-0.07in	40	1.541	39.130	0.600	15.240	0.070	1.778	0.200	5.080		
SDIP42-0.6in-0.07in	42	1.45	36.830	0.600	15.240	0.070	1.778	0.200	5.080	14	
SDIP48-0.6in-0.07in	48	1.750	44.460	0.600	15.240	0.070	1.778	0.225	5.720		

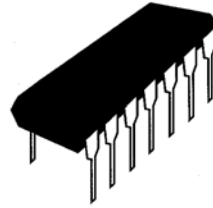
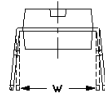
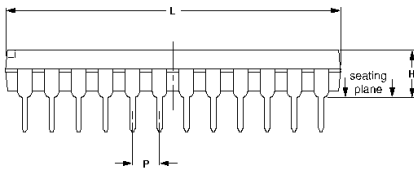
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4.1 Dip Dual Inline Package



Part Number Information:

SOIC14-0.15in-0.05in

Pin Count

Pitch

Width

4.1 DIP Cont 4		Length (L)		Lead Spread(W)		Pitch (P)		Height (H)		Qty per Tube	Notes
Part Number	Leads	in	mm	in	mm	in	mm	in	mm		
SDIP52-0.6in-0.07in	52	1.81	45.974	0.600	15.240	0.070	1.778	-	-	11	
SDIP56-0.6in-0.07in	56	2.06	52.324	0.600	15.240	0.070	1.778	-	-	9	
SDIP64-0in-0.07in	64	-	-	-	-	0.070	1.778	-	-		
SDIP64-0.75in-0.07in	64	2.27	57.658	0.750	19.050	0.070	1.778	0.200	5.080	9	

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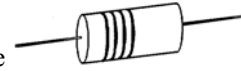
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Diagram

4.2 AR Axial Resistors

Picture



Part Number System

Size (Watts)	Wire Wound	Molded Carbon Comp	Epoxy Coated	Metal Film
1/20	-	-	-	AR1/20WMF
1/16	-	-	AR1/16WEC	-
1/10	-	-	-	AR1/10WMF
1/8	-	AR1/8WMCC	AR1/8WEC	AR1/8WMF
1/4	-	AR1/4WMCC	AR1/4WEC	AR1/4WMF
1/2	-	AR1/2WMCC	AR1/2WEC	AR1/2WMF
3/4	-	-	AR3/4WEC	AR3/4WMF
1	AR1WMWW	AR1WMCC	AR1WEC	AR1WMF
2	AR2WMWW	AR2WMCC	AR2WEC	-
3	AR3WMWW	-	AR3WEC	-
4	AR4WMWW	-	-	-
6	AR6WMWW	-	-	-
8	AR8WMWW	-	-	-
10	AR10WMWW	-	-	-

Other sizes available, Call us for UnListed or Obscure Items!

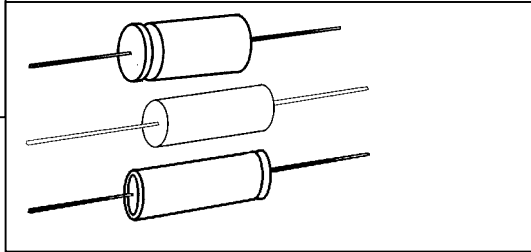
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- 1 - 4.2 Axial Resistors.doc Revision:15

Diagram



4.3 AC Axial Capacitors

Part Number System

 Axial Electrolytic	 Axial Molded	 Solid Tantalum	

Many types of Axial Capacitors exist. They vary in *body length, diameter, lead length and lead diameter*. Main Types consist of *Electrolytic, Ceramic, Tantalum, and Polyester*. The list is too exhaustive to compile before publication. Please call us with your requirements.

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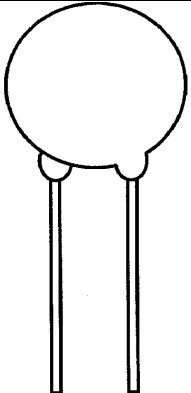
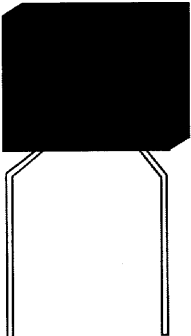
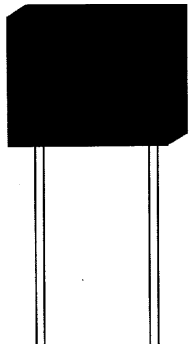
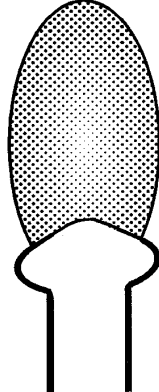
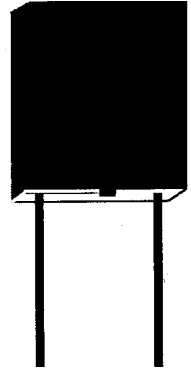
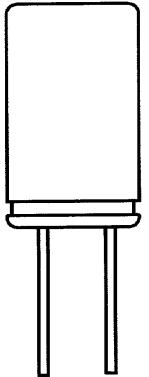
- 1 - 4.3 Axial Capacitors.doc Revision:12

Diagram

Picture

4.4 RC Radial Capacitors

Part Number System

				
Ceramic Disk	CK04 & CK05	CK06	Dip Tantalum	Molded Tantalum
				
Radial Electrolytic				

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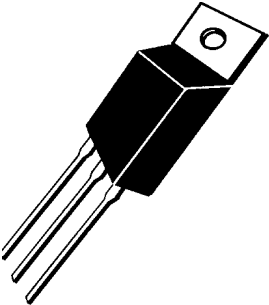
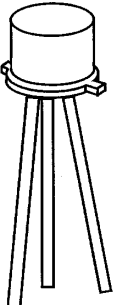
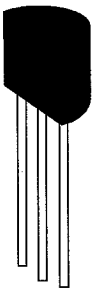
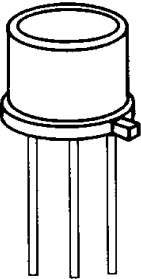
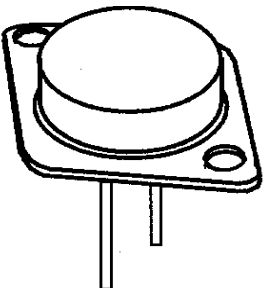
- 1 - 4.4 Radial Capacitor.doc Revision:10

**4.5 TO
Transistors**

Diagram

Picture

Part Number System

 <p>TO220</p>	 <p>TO18</p>	 <p>TO92</p>	 <p>TO5 & TO39</p>	 <p>TO3</p>

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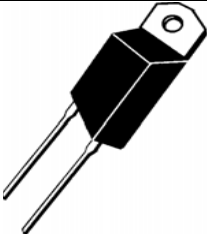
- 1 - 4.5 Transistors.doc Revision:9

Diagram

Picture

**4.6 DO
Diodes**

Part Number System

 DO35	 SOD93			

Other Diode Packages are available. Please Call with a description or Package Number

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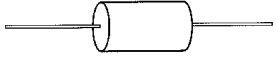

- 1 - 4.6 Diodes.doc Revision:10

4.7 AI
Axial Inductors

Diagram

Picture

Part Number System

				
AI-MOLDED	AI-OPEN WOUND			

Other Shapes Available, Call us with a description.

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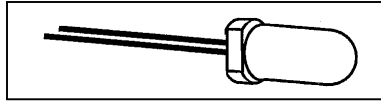
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- 1 - 4.7 Axial Inductors.doc Revision:9

Diagram

4.8 LED
Light Emitting Diodes



Part Number System

We Currently have the Following Round LEDs in stock. Square and Rectangular LEDs are quickly available. Please call us and let us know your special Requirements.

LEDT1 (3mm)

LEDT1-3/4 (5mm)

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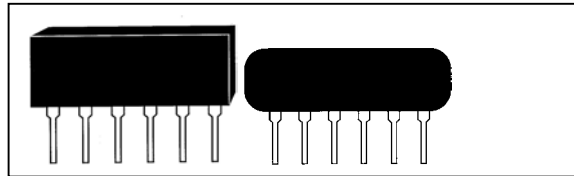
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- 1 - 4.8 LED.doc Revision:14

Diagram



4.9 SIP
Single Inline Package

Part Number System

At Time of publication Search Electronics offers the following Sip Packages from stock. If you require another configuration please call us as we have nearly all packages available to us for delivery within a few days. Please Specify if you need Molded or Epoxy Coated Body.

SIP3
SIP4
SIP5
SIP6
SIP8
SIP9
SIP10
SIP12

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- 1 - 4.9 Single Inline Packages.doc Revision:12

Diagram

5.3 Packaging Trays, Tape, Tubes, etc

Picture

Part Number System

At time of Publication we have The following Packaging Material in stock. If you don't see shat you need give us a call. Often our Manufacturers have what you need in stock for quick delivery.

14X22 BGA TRAYS
32 TSOP TRAYS
8MMPAPERTAPEX2MM
TAPE FOR MICRO BGA
TRAY BGA 35X35
TRAYS FOR BGA
TRAYS FOR BGA
TSOP TRAYS
TV46 1K/REELS

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- 1 - 5.3 Packaging.doc Revision:10