

MELF Resistors

Metal Electrode Leadless Face

Metal Electrode Leadless Face (MELF) Resistors are round or cylindrical in shape. They are available in embossed plastic tape on 7" reels. The terminals on MELF resistors are force-fitted steel caps with Sn plated termination. Parts are also available in Zero-Ohm value. Land pattern sizes for MELF resistors are the same as SMD chip resistor.

MELF Metal Electrode Leadless Face Component Resistors

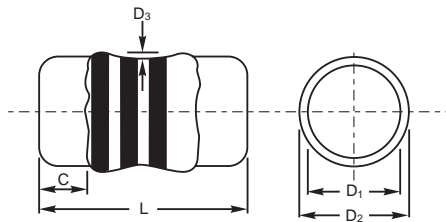
Part Description	Body Size		Tape Width	Tape Pitch	Quantity 7" Reel
	(Inch)	(mm)			
0805SMR-MELF-PL-Sn	.08" x .05"	2.0 x 1.27mm	8mm	4mm	3,000
1206SMR-MELF-PL-Sn	.12" x .06"	3.0 x 1.5mm	8mm	4mm	2,000
1406SMR-MELF-PL-Sn	.14" x .06"	3.56 x 1.5mm	8mm	4mm	3,000
2309SMR-MELF-PL-Sn	.23" x .09"	5.84 x 2.29mm	12mm	4mm	1,500

Notes

- MELF is the acronym for Metal Electrode Leadless Face.
- 90/10 solder plated end caps.
- Suitable for reflow and wave soldering.
- Meets or exceeds EIAJ-8009, EIA-PDP-100.
- Force fitted steel caps are tin plated. SnPb is available upon request based on availability.
- Tape type is plastic.

Part Description System

Body Size in Inches — 0805SMR—MELF—PL — Tape Type
 Surface Mount Resistor — Cylindrical MELF Type
 Carbon Film Resistor



Case Size	Size Code Dimensions				
	L	C Min	D ₁	D ₂ Max	D ₃ Max
0805	2.0±0.1 (0.079±0.004)	0.3 (0.012)	1.25±0.05 (0.049±0.002)	1.35 (0.053)	0.07 (0.003)
1406	3.5±0.2 (0.138±0.008)	0.5 (0.02)	1.45±0.10 (0.057±0.004)	1.55 (0.061)	0.10 (0.004)
1206	3.2±0.2 (0.126±0.008)		1.55±0.15 (0.061±0.006)	1.75 (0.069)	0.10 (0.004)
2309	5.9±0.2 (0.232±0.008)		2.2±0.10 (0.087±0.004)	2.40 (0.094)	0.15 (0.006)

Unit: mm (Inch)

Surface Mount Electrolytic (SME) capacitors are measured according to the diameter of the can mounted on top of the terminations. Sizes range from 3mm to 24mm in diameter. The most popular sizes are listed below. Please call if different sizes are needed. These components come packaged on plastic embossed carrier tape. Standard reel sizes are 15".

SME Surface Mount Electrolytic Capacitors

Part Description	Body Size	Tape Width	Tape Pitch	Quantity 15" Reel
3mm-SME-PL-Sn	3mm	12mm	8mm	2,000
4mm-SME-PL-Sn	4mm	12mm	8mm	2,000
5mm-SME-PL-Sn	5mm	12mm	12mm	1,000
6.3mm-SME-PL-Sn	6.3mm	16mm	12mm	1,000
8mm-SME-PL-Sn	8mm	16mm	12mm	1,000
10mm-SME-PL-Sn	10mm	24mm	16mm	500
18mm-SME-PL-Sn	18mm	44mm	32mm	125

Notes

- Surface mount electrolytic capacitors come standard on 15" reels.
- Components are measured by the diameter of the electrolytic can.
- Lead-free available with 100% Sn.



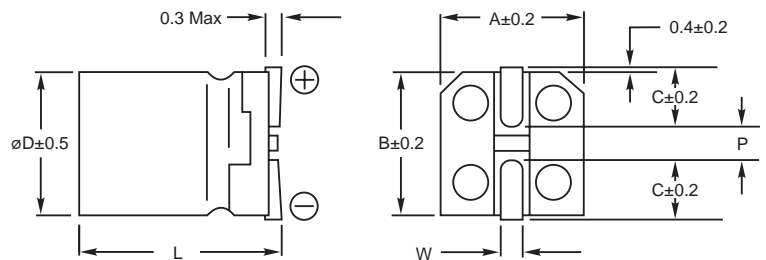
Lead spacing and wire diameter

Unit: mm

øD	L	A	B	C	W	P
4	5.3±0.2	4.3	4.3	2.0	0.5±0.8	1.0
5	5.3±0.2	5.3	5.3	2.3	0.5±0.8	1.5
6.3	5.3±0.2	6.6	6.6	2.7	0.5±0.8	2.0
8	6.3±0.3	8.4	8.4	3.4	0.5±0.8	2.3
8	10±0.5	8.4	8.4	3.0	0.7±1.1	3.1
10	10±0.5	10.4	10.4	3.3	0.7±1.1	4.7
18	16.5	19.0	21.0	6.5	1.2±0.3	6.7

Part Description System

Body Size — 3mm—SME—PL— Plastic Carrier Pack
Surface Mount Electrolytic Capacitor



MELF Diodes

Metal Electrode Face Components

Metal Electrode Face Components (MELF) have metallized terminals at each end of a cylindrical body. MELF components are designed to fit the same footprints as flat components i.e., 0805 (.08" x .05") and the 0603 (.06" x .03"). MELF packages are available on plastic tape and reel.

MELF Metal Electrode Face Component Diodes

Part Description	Body Size	Quantity 7" Reel	Tape Width	Tape Pitch	Quantity 13" Reel
SOD80-TR-Sn	1.4 x 3.4mm	2,500	8mm	4mm	10,000
SOD80 Package is also known as LL-34 or DO-213AA.					
SM1-TR-Sn	2.6 x 5.0mm	1,500	12mm	4mm	5,000
Package is also known as DO-213AB.					

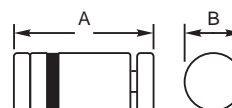
Notes

- MELF Diodes are cylindrical glass or plastic packages with Sn termination for lead-free.

Package	SOD80 (LL34)	SM1 (LL41)
Dimension A	3.4mm	5.0mm
Dimension B	1.5mm	2.8mm

Part Description System

Device/Package — SOD80—TR — Tape and Reel



SOT package is a rectangular surface mount transistor diode with three or more gull-wing leads. The leads are on the two length sides of the package. SOT packages are JEDEC compliant. Popular sizes are the SOT23, DPAK, SOT223 and SOT89.



For kits see pages 83, 64, 68, 70, 61, 75, 76 and 81.

SMT Surface Mount Transistors

Part Description	Number of Pins	Body Size "W"	Body Leads "L"	SC Device	Tape Width	Tape Pitch	Quantity Per Reel
SC90-TR-Sn	3	1.6mm	1.6mm	SC-75A	8mm	4mm	3,000
SOT323-TR-Sn	3	2.0mm	2.1mm	SC-70	8mm	4mm	3,000
SOT353-TR-Sn	5	2.0mm	2.1mm	SC-88A / SOT325	8mm	4mm	3,000
SOT363-TR-Sn	6	2.0mm	2.1mm	SC-88 / SOT326	8mm	4mm	3,000
SOT23-TR-Sn	3	2.9mm	2.4mm	TO-236AB	8mm	4mm	3,000
SOT25-TR-Sn	5	2.9mm	2.8mm	SC-74A	8mm	4mm	3,000
SOT26-TR-Sn	6	2.9mm	2.8mm	SC-74	8mm	4mm	3,000
SOT143-TR-Sn	4	2.9mm	2.5mm	TO-253AA	8mm	4mm	3,000
SOT89-TR-Sn	3	4.5mm	4.0mm	SC-62 / TO-243AA	12mm	8mm	1,000
SOT223-TR-Sn	3	6.5mm	7.0mm	SC-73 / TO-261AA	12mm	8mm	1,000
DPAK-TR-Sn		6.5mm	9.5mm	SC-63 / TO-252-AA	16mm	8mm	2,500
D2PAK-TR-Sn		10.0mm	15.2mm	TO-263AB	24mm	12mm	800/1,000

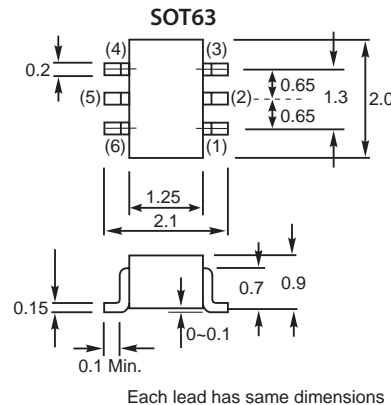
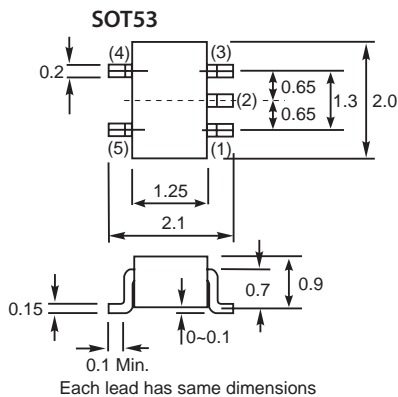
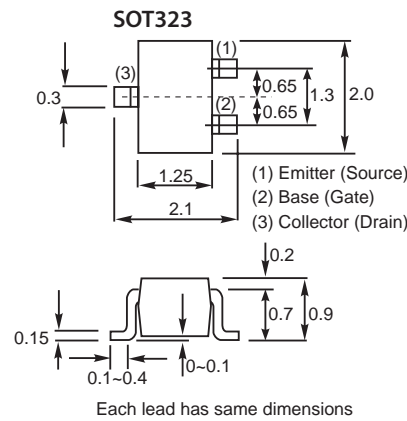
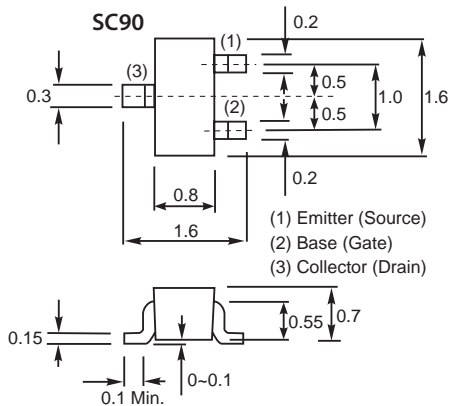
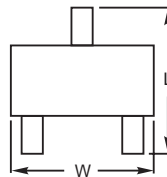
Notes

- Carrier pack is plastic for surface mount transistors.
- Tape type is plastic.
- Parts only available on Tape and Reel.
- Tin-Lead solder plating available upon request based on availability.
- Lead-free available with 100% Sn alloy.

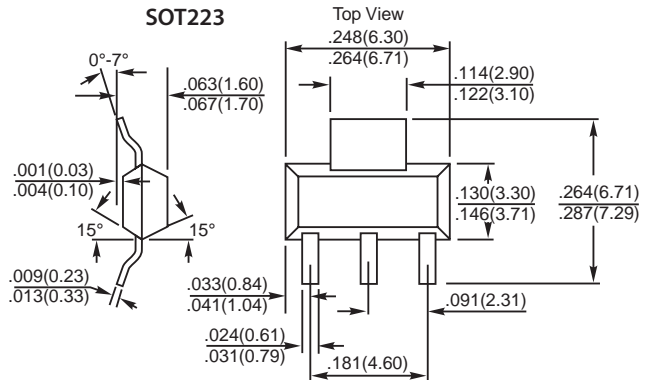
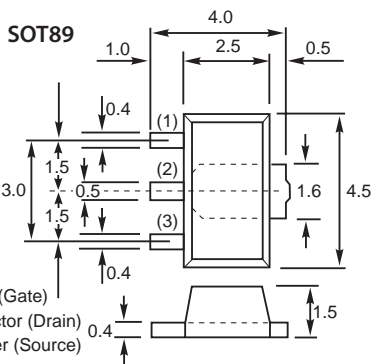
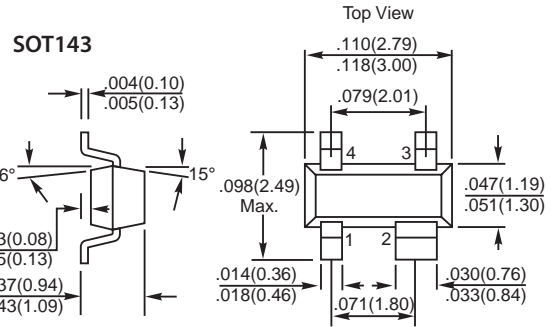
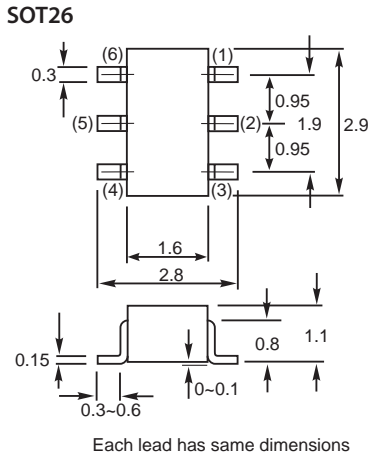
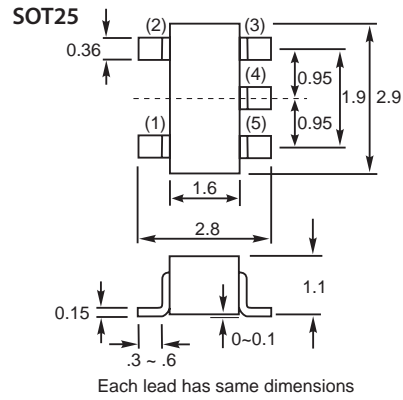
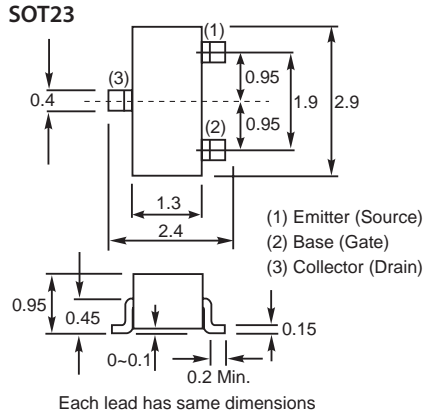


Part Description System

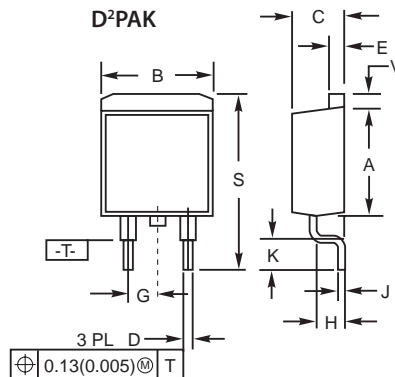
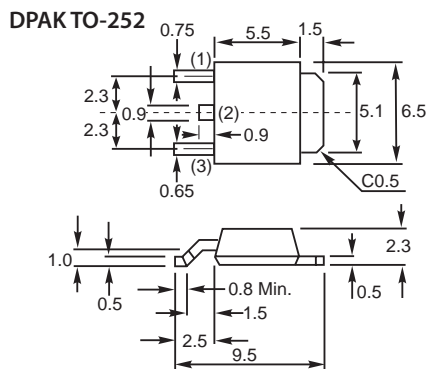
Transistor Package — SOT326-TR — Packaging



Lead-Free Surface Mount Transistors



Notes:
1. Dimensioning and tolerancing per ANSI Y14.5M, 1982.
2. Controlling Dimension: Inch.



Dim.	Inches		Millimeters	
	Min.	Max.	Min.	Max.
A	0.340	0.380	8.64	9.65
B	0.380	0.405	9.65	10.29
C	0.160	0.190	4.06	4.83
D	0.020	0.035	0.51	0.89
E	0.045	0.055	1.14	1.40
G	0.100 BSC		2.54 BSC	
H	0.080	0.110	2.03	2.79
J	0.018	0.025	0.46	0.64
K	0.090	0.110	2.29	2.79
S	0.575	0.625	14.60	15.88
V	0.045	0.055	1.14	1.40