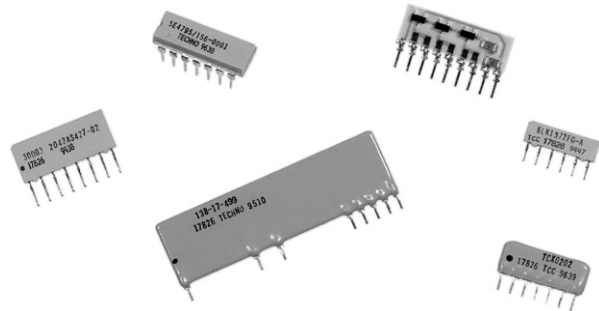


Custom Thick Film Resistor Networks, Single-In-Line (Molded or Conformal Coated SIPs) and Dual-In-Line (Molded DIPs)



FEATURES

- Custom resistor, capacitor, diode and inductor network combinations
- R, C, L, D multicomponent networks
- Processed to MIL-PRF-83401
- Fast turnaround time
- Unlimited schematics possible
- Design through production
- High temperature solder joints
- Wide resistance range
- Ultra high precision laser trimming
- Double sided printing and through holes/VIAS
- High density circuit designs
- Tighter parameters available
- High power ratings available

SCHEMATICS		
DIPS	SIPS, Molded	SIPS, Coated

ELECTRICAL SPECIFICATIONS

- Resistance Range:** 1 Ω to 50 M Ω
- Tolerance:** $\pm 0.5\%$ available
- Temperature Coefficient:** ± 100 ppm/ $^{\circ}\text{C}$ available
- TCR Tracking:** ± 50 ppm/ $^{\circ}\text{C}$ available
- Ratio Matching:** $\pm 0.5\%$ available
- Power Rating (Element):** 1/8 W at + 70 $^{\circ}\text{C}$ typical

ENVIRONMENTAL SPECIFICATIONS

- Temperature Limits:** - 65 $^{\circ}\text{C}$ to + 125 $^{\circ}\text{C}$

MECHANICAL SPECIFICATIONS

- Resistive Element:** Thick film
- Solder Joints:** High temperature Sn10
- Encapsulation:** Thermoset epoxy for molded. Epoxy for conformal coated
- Lead Lengths:** 0.060" (1.52 mm) to 0.190" (4.83 mm) molded, 0.060" (1.52 mm) to 0.290" (7.37 mm) coated
- Substrates:** 96 % alumina, Thicknesses: 0.020" (0.508 mm) to 0.040" (1.016 mm)
- Resistor Coatings:** Glass passivation, dielectrics for crossovers

DIMENSIONS in inches (millimeters)					
<p>DIPS</p> <p>Pin #1 Identifier</p> <p>0.045 ± 0.020 (1.14 ± 0.508)</p> <p>0.020 ± 0.002 (0.508 ± 0.051)</p> <p>0.100 ± 0.005 (2.54 ± 0.127) Non-cumulative</p> <p>0.300 (7.62)</p> <p>0.260 (6.60)</p>					
<p>SIPS, Molded</p> <p>Pin #1 identifier</p> <p>0.018 ± 0.003 (0.457 ± 0.076)</p> <p>0.020 ± 0.003 (0.508 ± 0.076)</p> <p>0.010 ± 0.005 (2.54 ± 0.127) Non-cumulative</p> <p>D max.</p>			<p>SIPS, Coated</p> <p>Pin #1 identifier</p> <p>0.015 (0.381) min.</p> <p>0.018 ± 0.002 (0.457 ± 0.051)</p> <p>0.100 ± 0.005 (2.54 ± 0.127) Non-cumulative</p> <p>D max.</p>		
MODEL	No. of Pins	A (max.)	B (max.)	C (max.)	D (max.)
DIPS	14	0.775 (19.69)	0.190 (4.83)	0.135 (3.43)	-
DIPS	16	0.875 (22.23)	0.190 (4.83)	0.135 (3.43)	-
SIPS, molded, low profile	6	0.598 (15.19)	0.192 (4.88)	0.190 (4.83)	0.088 (2.23)
SIPS, molded, low profile	8	0.798 (20.27)	0.192 (4.88)	0.190 (4.83)	0.088 (2.23)
SIPS, molded, low profile	10	0.998 (25.35)	0.192 (4.88)	0.190 (4.83)	0.088 (2.23)
SIPS, molded, high profile	6	0.598 (15.19)	0.340 (8.64)	0.190 (4.83)	0.088 (2.23)
SIPS, molded, high profile	8	0.798 (20.27)	0.340 (8.64)	0.190 (4.83)	0.088 (2.23)
SIPS, molded, high profile	10	0.998 (25.35)	0.340 (8.64)	0.190 (4.83)	0.088 (2.23)
SIPS, coated	2	0.200 (5.08)	0.200 (5.08)	0.290 (7.37)	0.100 (2.54)
SIPS, coated	3 thru 19	(1)	(1)	0.290 (7.37)	(1)
SIPS, coated	20	2.00 (50.80)	(1)	0.290 (7.37)	(1)

Note

(1) Depending on customer requirements

ENVIRONMENTAL PERFORMANCE		
TEST ⁽²⁾		Maximum ΔR (TYPICAL TEST LOTS)
Power Conditioning	(108)	$\Delta R < 0.10\%$
Thermal Shock	(107)	$\Delta R < 0.10\%$
Thermal Shock Group C	(107)	$\Delta R < 0.10\%$
Short Time Overload		$\Delta R < 0.03\%$
Low Temperature Storage		$\Delta R < 0.02\%$
Low Temperature Operation		$\Delta R < 0.02\%$
Low Temperature Exposure		$\Delta R < 0.06\%$
Moisture Resistance	(106)	$\Delta R < 0.10\%$
Resistance to Soldering Heat	(210)	$\Delta R < 0.10\%$
Shock	(213)	$\Delta R < 0.04\%$
Vibration	(204)	$\Delta R < 0.04\%$
Load life	(108)	$\Delta R < 0.22\%$

Note

(2) Numbers in parentheses refer to test method MIL-STD-202 as modified by the detail specification

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• For custom product information contact factory



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