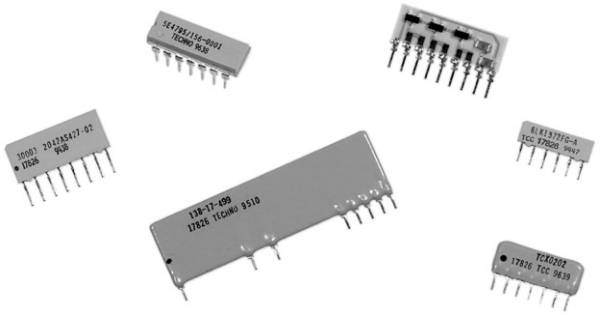
Custom Thick Film Resistor Networks, Single-In-Line (Molded or Conformal Coated SIPs) and Dual-In-Line (Molded DIPs)

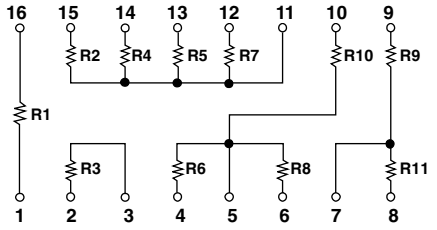


FEATURES

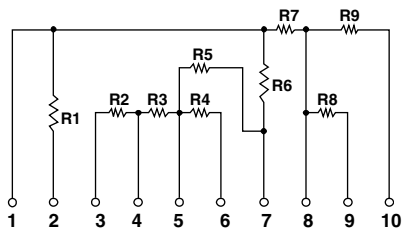
- **Custom resistor, capacitor, diode and inductor network combinations**
- **R, C, L, D multicomponent networks**
- Processed to MIL-PRF-83401
- Fast turnaround time
- Unlimited schematics possible
- Design through production
- High temperature solder joints
- Wide resistance range
- Ultra high precision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

SCHEMATICS

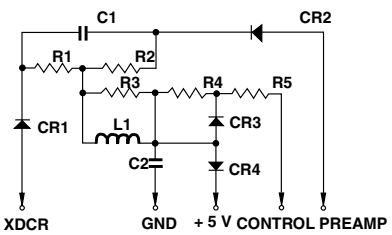
DIPS

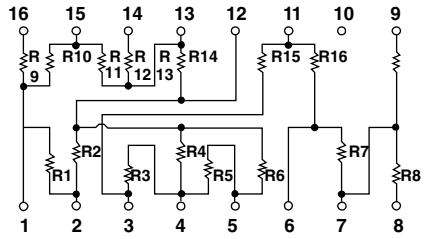


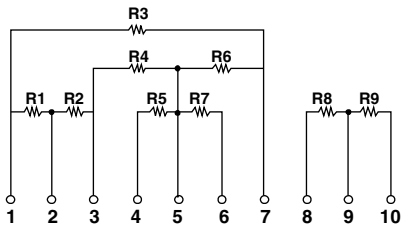
SIPS, Molded

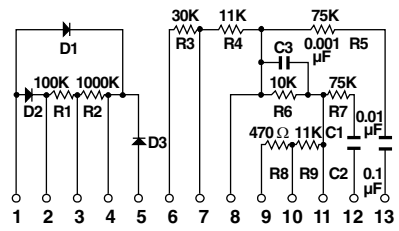


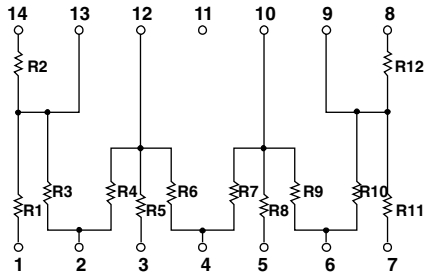
SIPS, Coated

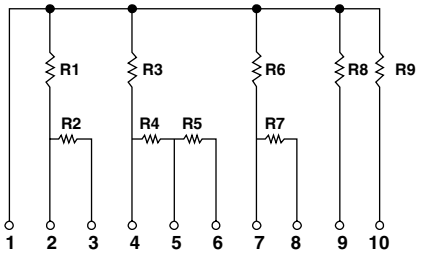


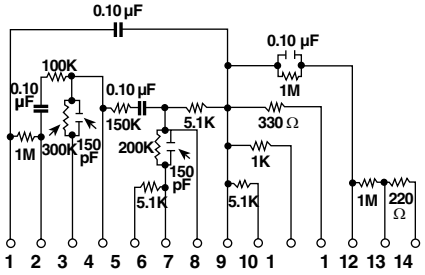












ELECTRICAL SPECIFICATIONS

Resistance Range: 1 Ω to 50 MΩ
Tolerance: ± 0.5 % available
Temperature Coefficient: ± 100 ppm/°C available
TCR Tracking: ± 50 ppm/°C available
Ratio Matching: ± 0.5 % available
Power Rating (Element): 1/8 W at + 70 °C typical

ENVIRONMENTAL SPECIFICATIONS

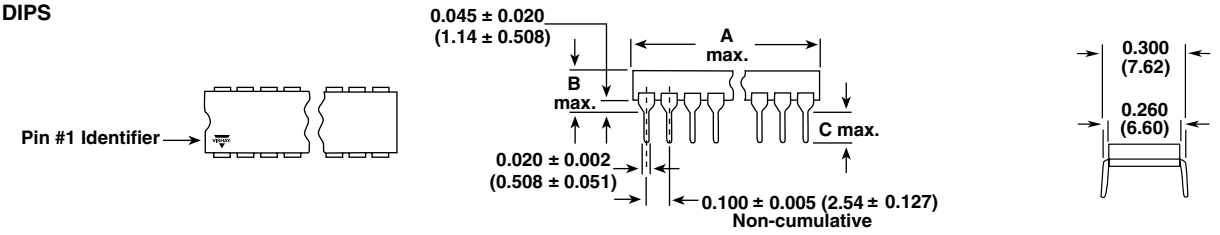
Temperature Limits: - 65 °C to + 125 °C

MECHANICAL SPECIFICATIONS

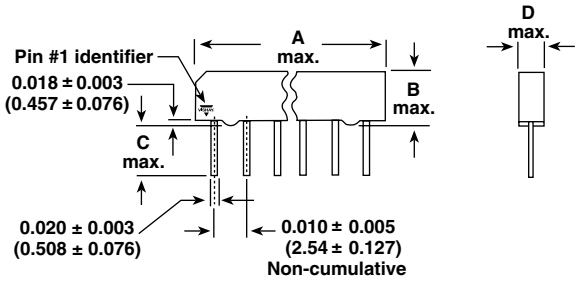
Resistive Element: Thick film
Solder Joints: High temperature Sn10
Encapsulation: Thermoset epoxy for molded. Epoxy for conformal coated
Lead Lengths: 0.060" (1.52 mm) to 0.190" (4.83 mm) molded, 0.060" (1.52 mm) to 0.290" (7.37 mm) coated
Substrates: 96 % alumina, Thicknesses: 0.020" (0.508 mm) to 0.040"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

DIMENSIONS in inches (millimeters)

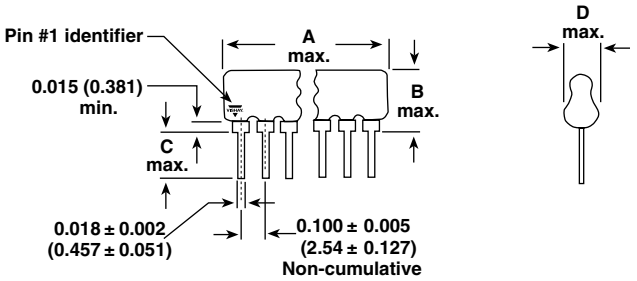
DIPS



SIPS, Molded



SIPS, Coated



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)	ΔR < 0.10 %
Thermal Shock	(107)	ΔR < 0.10 %
Thermal Shock Group C	(107)	ΔR < 0.10 %
Short Time Overload		ΔR < 0.03 %
Low Temperature Storage		ΔR < 0.02 %
Low Temperature Operation		ΔR < 0.02 %
Low Temperature Exposure		ΔR < 0.06 %
Moisture Resistance	(106)	ΔR < 0.10 %
Resistance to Soldering Heat	(210)	ΔR < 0.10 %
Shock	(213)	ΔR < 0.04 %
Vibration	(204)	ΔR < 0.04 %
Load life	(108)	ΔR < 0.22 %

Note

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

ORDERING INFORMATION

- For custom product information contact factory

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