

MODEL T SERIES

Thick Film

Super Low Profile SIP

Resistor Networks



ELECTRICAL

| | |
|--|--|
| Standard Resistance Range, Ohms | 22 to 1Meg |
| Standard Resistance Tolerance, at 25°C | ±5% (J Tol.) Optional: ±2% (G Tol.) |
| Operating Temperature Range | -55°C to +125°C |
| Temperature Coefficient of Resistance | ±200ppm/°C |
| Temperature Coefficient of Resistance Tracking | ±50ppm/°C |
| Maximum Operating Voltage | 50Vdc or \sqrt{PR} |
| Insulation Resistance | ≥10,000 Megohms |

4

MECHANICAL

| | |
|--------------------|------------------------|
| Lead Material | Steel Alloy |
| Lead Finish | Solder (90/10 Typical) |
| Substrate Material | 96% Alumina |
| Resistor Material | Cermet |
| Body Material | Conformal Epoxy Resin |

ENVIRONMENTAL (PER MIL-R 83401, REV. D)

| | |
|---|-----------------------|
| Thermal Shock | $\Delta R \pm 0.50\%$ |
| Short Time Overload | $\Delta R \pm 0.50\%$ |
| Terminal Strength | $\Delta R \pm 0.25\%$ |
| Moisture Resistance | $\Delta R \pm 0.50\%$ |
| Mechanical Shock | $\Delta R \pm 0.25\%$ |
| Vibration Shock | $\Delta R \pm 0.25\%$ |
| Low Temperature Storage | $\Delta R \pm 0.25\%$ |
| High Temperature Exposure | $\Delta R \pm 0.50\%$ |
| Load Life, 1,000 Hours | $\Delta R \pm 2.00\%$ |
| Resistance to Solder Heat (Per MIL-STD-202, Method 210, Cond.B) | $\Delta R \pm 0.25\%$ |
| Storage Temperature Range | -55°C to +125°C |

Specifications subject to change without notice.

APPLICABLE DOCUMENTS

MIL-R-83401 — Resistor Networks, Fixed, Film, General Specifications
MIL-STD-105 — Sampling Procedures and Tables for Inspection by Attributes
MIL-STD-202 — Test Methods for Electronic and Electrical Component Parts

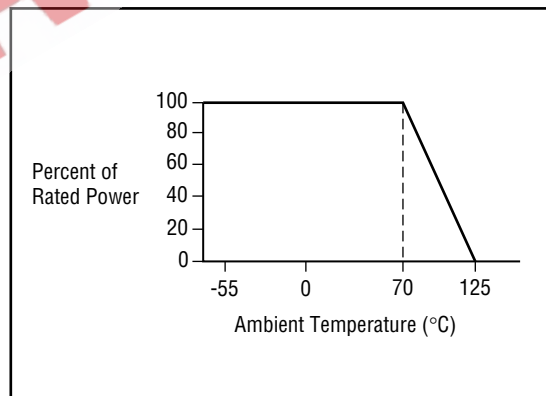
STANDARD RESISTANCE VALUES, OHMS

| -3 Circuit (Isolated Resistors) & -1 Circuit (Bussed Resistors) | | | | | |
|--|---------|---------|---------|---------|---------|
| Ohms | Code | Ohms | Code | Ohms | Code |
| 22 | 220 | 1K | 102 | 27K | 273 |
| 33 | 330 | 1.2K | 122 | 33K | 333 |
| 39 | 390 | 1.5K | 152 | 39K | 393 |
| 47 | 470 | 1.8K | 182 | 47K | 473 |
| 56 | 560 | 2K | 202 | 56K | 563 |
| 68 | 680 | 2.2K | 222 | 68K | 683 |
| 82 | 820 | 2.7K | 272 | 82K | 823 |
| 100 | 101 | 3.3K | 332 | 100K | 104 |
| 120 | 121 | 3.9K | 392 | 120K | 124 |
| 150 | 151 | 4.7K | 472 | 150K | 154 |
| 180 | 181 | 5.6K | 562 | 180K | 184 |
| 220 | 221 | 6.8K | 682 | 220K | 224 |
| 270 | 271 | 8.2K | 822 | 270K | 274 |
| 330 | 331 | 10K | 103 | 330K | 334 |
| 390 | 391 | 12K | 123 | 390K | 394 |
| 470 | 471 | 15K | 153 | 470K | 474 |
| 560 | 561 | 18K | 183 | 560K | 564 |
| 680 | 681 | 20K | 203 | 680K | 684 |
| 820 | 821 | 22K | 223 | 820K | 824 |
| | | | | 1Meg | 105 |
| -5 Circuit (Dual Terminators) | | | | | |
| Ohms | Code | Ohms | Code | Ohms | Code |
| R1/R2 | R1/R2 | R1/R2 | R1/R2 | R1/R2 | R1/R2 |
| 180/390 | 181/391 | 330/390 | 331/391 | 3K/6.2K | 302/622 |
| 220/270 | 221/271 | 330/470 | 331/471 | | |
| 220/330 | 221/331 | 330/680 | 331/681 | | |

POWER DISSIPATION, AT 70°C

| Model | Per Package | Per Resistor |
|-------|----------------------|--------------|
| Tn-1 | $(n-1) \times 0.100$ | 0.100 |
| Tn-3 | $(n-1) \times 0.100$ | 0.100 |
| Tn-5 | $(n-1) \times 0.100$ | 0.060 |

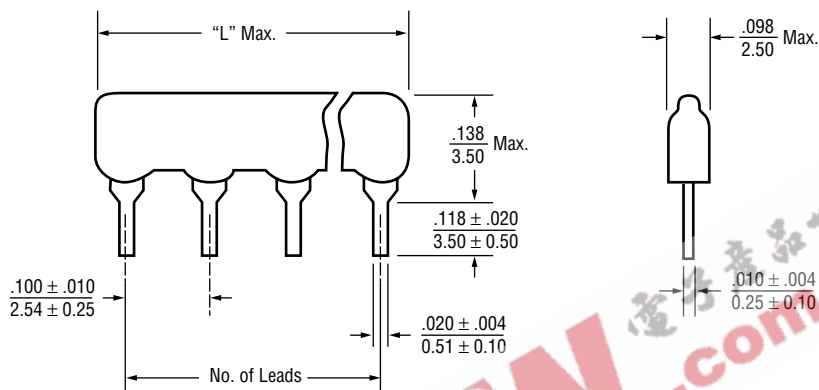
POWER DERATING CURVE



PACKAGING

Standard: Plastic Bags
Capacity = 200 Units

OUTLINE DIMENSIONS (Inch/mm)

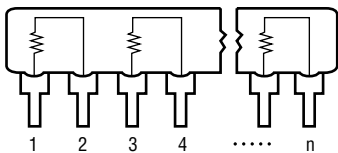


| # of Leads | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|
| Dim. "L" Max. | .40 10.16 | .50 12.70 | .60 15.24 | .70 17.78 | .80 20.32 | .90 22.86 | 1.00 25.40 | 1.10 27.94 | 1.20 30.48 | 1.30 33.02 | 1.40 35.56 |

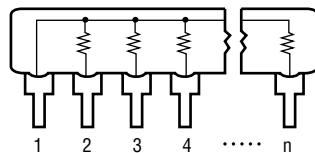
4

SCHEMATICS

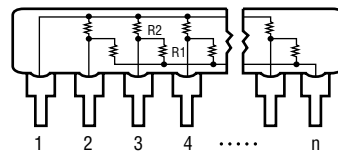
-3 Circuit Isolated Resistors



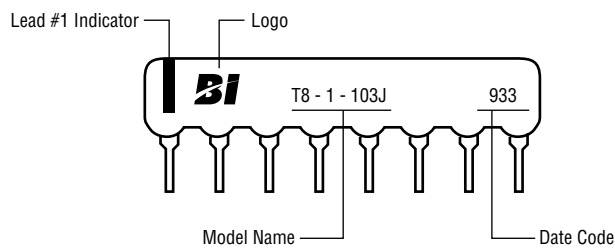
-1 Circuit Bussed Resistors



-5 Circuit Dual Terminator



TYPICAL PART MARKING



ORDERING INFORMATION

