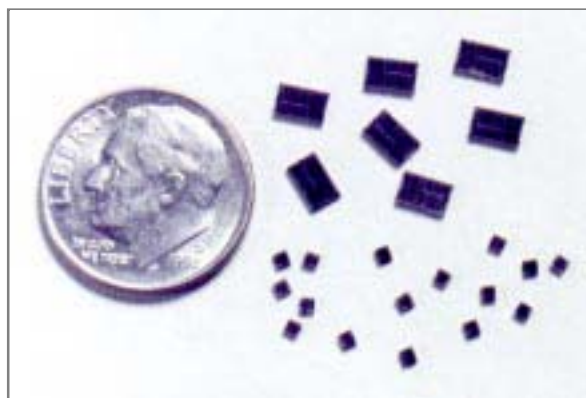


APPLICATIONS

- Implantable Medical Devices
- Cellular Telephones
- Avionics
- Satellites

Precision Resistor Networks



Thin film resistors manufactured with chromium silicon provide a smaller solution for applications where space is at a premium; laser trimmed high precision resistors are available as standard values or custom arrays with tolerance <1%.

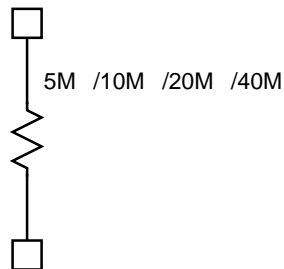
FEATURES AND BENEFITS

Small Size	Precision thin film resistors with 2500 Ω /sq provide high value resistors in a small area.
High Value Resistors	5M, 10M, 20M and 40M Ω resistors available as standard products.
Network of Resistors	Standard resistor networks including voltage divider 1000:1, bussed resistors (100k Ω each) and a resistor with variable value of 10K Ω – 1.1M Ω , by different pinouts. Custom network solutions also available.
High Precision	Resistors are laser trimmed with tolerance <1%.
High Quality	Manufactured on solid state semiconductor process line providing high stability and repeatability with demonstrated reliability.
Assembly	Surface mount dual-line package, surface mount ballgrid or die form are optional.
Temperature Coefficients	Less than 300 ppm/ $^{\circ}$ C temperature tracking of <2 ppm/ $^{\circ}$ C.

PRECISION RESISTOR NETWORKS

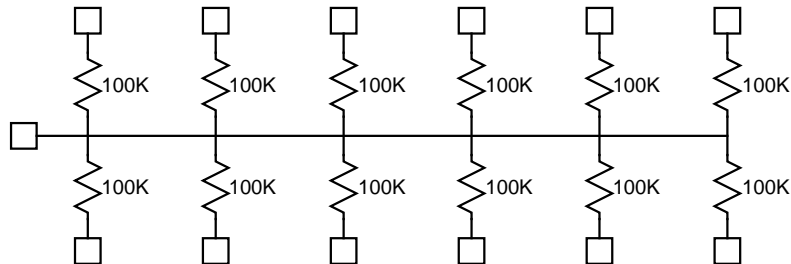
DISCRETE RESISTORS

Discrete Resistor



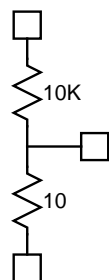
$I_{max} = 165\mu A$

Bussed Resistor Network



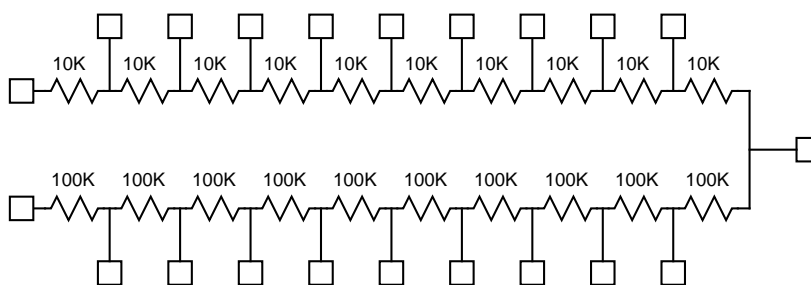
$I_{max} = 495\mu A$

Voltage Divider



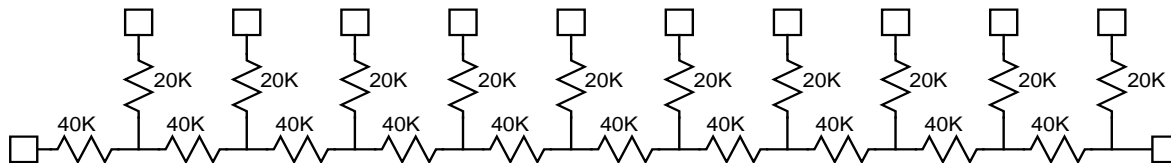
$I_{max} = 495\mu A$

Multiple Bond Pads Resistor 10KΩ to 1.1MΩ



$I_{max} = 495\mu A$

R2R Ladder Resistor Network



$I_{max} = 495\mu A$

SPECIFICATIONS

Material	CrSi
Sheet resistance	2500Ω/sq
Operating temperature	-55 to 150°C
Max current	165μA to 1.6mA
Temperature coefficient TCR	< ±300 ppm/°C
Tolerance	<1%

ORDERING INFORMATION

Part #	Resistance Value
TFR05M	5M
TFR10M	10M
TFR20M	20M
TFR40M	40M
TFRBUS	See above
TFRDIVIDER	See above
TFRMULTI	See above
TFRLADDER	See above

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