

# High Power Resistive Products



## Resistors

AVX introduces its line of High Power Resistive Products. All products are designed and manufactured at our ISO 9001 Facilities. All products are tested in accordance with MIL-PRF-55342.

### ELECTRICAL SPECIFICATIONS

**Resistance:** 50 and 100  $\Omega$  standard (10  $\Omega$  - 200  $\Omega$  available)

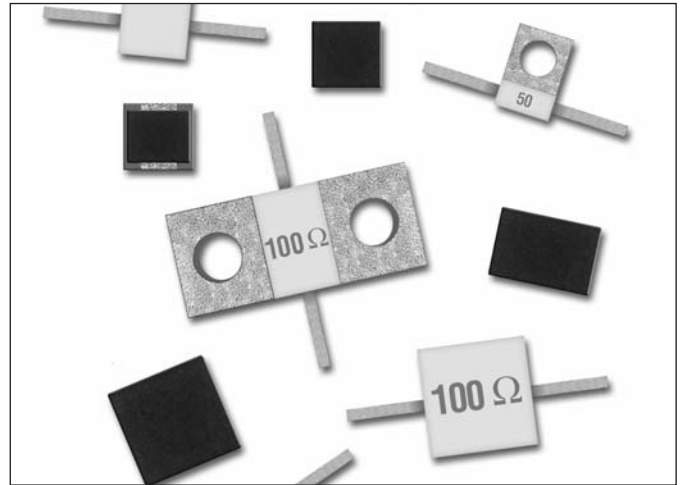
**Resistance Tolerance:**  $\pm 5\%$  standard ( $\pm 2\%$  available)

**Power:** 2 Watts through 250 Watts

**Operating Temperature Range:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$

**Temperature Coefficient:**  $< 150 \text{ ppm}/^{\circ}\text{C}$

**Low Capacitance**



### MECHANICAL SPECIFICATIONS

**Package:** Surface Mount Chips, Chips, Leaded Chips, Flanged

**Substrate Material:** Aluminum Nitride

**Process:** Thin Film

**Resistive Material:** Tantalum

**Terminals:** Silver

**Cover:** Alumina

**Mounting Flange:** 100% Cu, Ni or Ag Plated

**Mechanical Tolerance:**  $\pm 0.13$  (0.005)

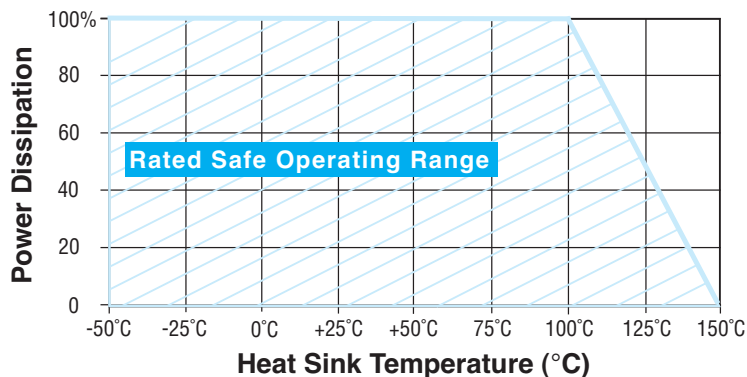
**SMT and Chip products, supplied on Tape and Reel**

**Non-Magnetic** (exception RP4 and RP5 Style Surface Mount Resistors)

**RoHS Compliant**



### POWER DERATING



# High Power Resistive Products



## Resistors

### SURFACE MOUNT CHIP RESISTORS – RP4 AND RP5 SERIES

#### GENERAL SPECIFICATIONS

**Resistance:** 50 and 100  $\Omega$  standard  
(contact factory for custom resistance values)

**Resistive Tolerance:**  $\pm 2\%$  standard

**Operating Temp Range:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$

**Temperature Coefficient:**  $<150$  ppm/ $^{\circ}\text{C}$

**Resistive Elements:** Proprietary Thin Film

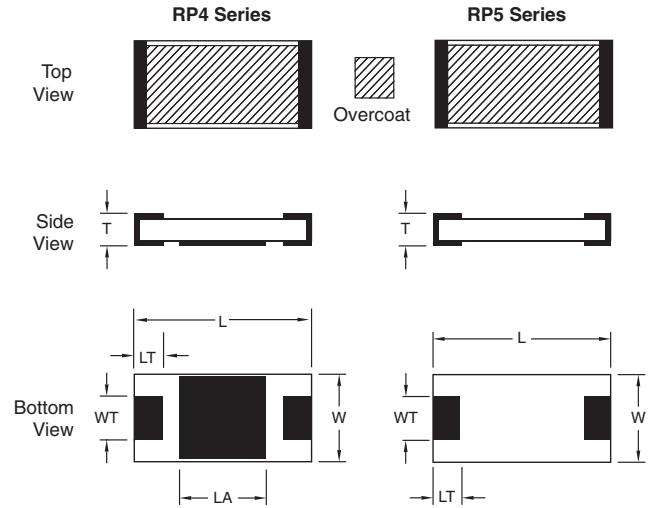
**Substrate Material:** Aluminum Nitride

**Terminals:** Silver over Nickel

**RoHS Compliant**

**Reliability:** In accordance with MIL-PRF-55342

**Tape and Reel Specifications:** See Page 38



mm (inches)

AVX Part Number*	W $\pm 0.25$ (0.010)	L $\pm 0.25$ (0.010)	T $\pm 0.13$ (0.005)	WT $\pm 0.13$ (0.005)	LT $\pm 0.13$ (0.005)	LA $\pm 0.13$ (0.005)	Capacitance (pF)	Power Max** (Watts)
RP42010RxxxxGTTR	2.54 (0.100)	5.08 (0.200)	1.02 (0.040)	2.29 (0.090)	0.76 (0.030)	2.41 (0.095)	.95 pF	10W
RP42525RxxxxGTTR	6.22 (0.245)	6.22 (0.245)	1.02 (0.040)	3.05 (0.120)	1.02 (0.040)	2.79 (0.110)	1.85 pF	20W
RP43725RxxxxGTTR	6.35 (0.250)	9.53 (0.375)	1.02 (0.040)	3.05 (0.120)	1.27 (0.050)	4.95 (0.195)	3.0 pF	30W
RP43737RxxxxGTTR	9.40 (0.370)	9.40 (0.370)	1.02 (0.040)	9.14 (0.360)	1.27 (0.050)	4.95 (0.195)	3.5 pF	40W
RP52010RxxxxGTTR	2.54 (0.100)	5.08 (0.200)	1.02 (0.040)	2.29 (0.090)	0.76 (0.030)	–	–	4W
RP52525RxxxxGTTR	6.22 (0.245)	6.22 (0.245)	1.02 (0.040)	3.05 (0.120)	1.02 (0.040)	–	–	6W
RP53725RxxxxGTTR	6.35 (0.250)	9.53 (0.375)	1.02 (0.040)	3.05 (0.120)	1.27 (0.050)	–	–	8W
RP53737RxxxxGTTR	9.40 (0.370)	9.40 (0.370)	1.02 (0.040)	9.14 (0.360)	1.27 (0.050)	–	–	10W

\* xxxx denotes Ohm value.

\*\* Test Condition: Chip soldered to a via patch on a 30-mil-thick Rogers RO4350 board; Land surfaces at  $100^{\circ}\text{C}$ ; maximum rated power applied.  
Specification: The resistance of the film shall change no more than 0.5% during and after a 1000-hr. Burn-in per Mil-PRF-55342.

#### HOW TO ORDER

RP4	2010	R	XXXX	G	T	TR
<b>AVX Series</b> See chart above	<b>Case Size</b> See chart above	<b>Type</b> R = Resistor	<b>Value</b> 0050 = 50 $\Omega$ 0100 = 100 $\Omega$	<b>Tolerance</b> J = $\pm 5\%$ G = $\pm 2\%$	<b>Terminal</b> T = Silver over Nickel	<b>Packaging</b> TR = Tape & Reel

Contact factory for custom ratings and sizes.

#### POWER DERATING

