

# High Power Resistive Products

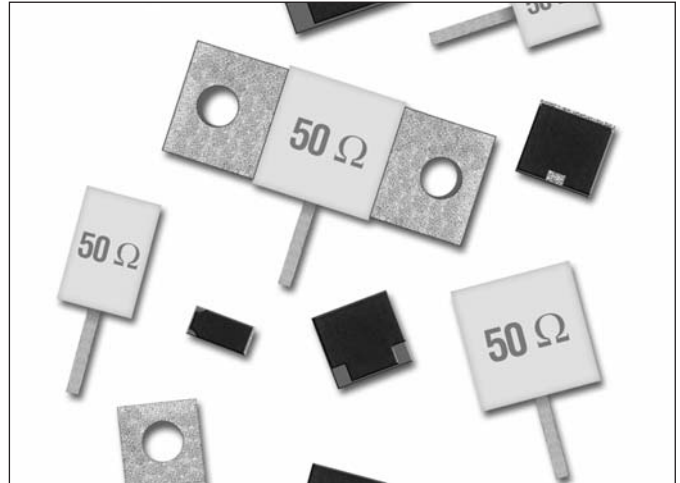


## Terminations

AVX introduces its complete line of High Power Termination Products. All Products are designed and manufactured at our ISO 9001 Facilities.

### ELECTRICAL SPECIFICATIONS

- Resistance:** 50  $\Omega$  standard (10  $\Omega$  - 200  $\Omega$  available)
- Resistance Tolerance:**  $\pm 5\%$  standard ( $\pm 2\%$  available)
- Power:** 2 Watts through 225 Watts
- Operating Temperature Range:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- Temperature Coefficient:**  $< 150$  ppm/ $^{\circ}\text{C}$
- Low VSWR**

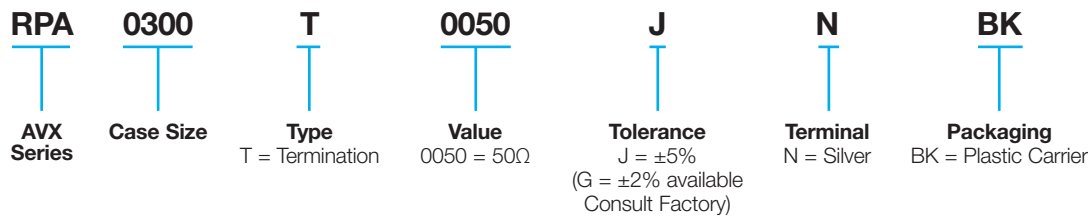


### MECHANICAL SPECIFICATIONS

- Package:** Surface Mount Chips, Chips, Leaded Chips, Flange Mount
- 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)
- RoHS Compliant**
- SMT and Chip products, supplied on Tape and Reel**

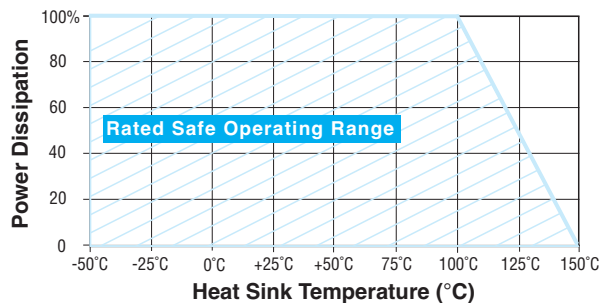


### FLANGE MOUNT TERMINATIONS HOW TO ORDER



Contact factory for custom ratings and sizes.

### POWER DERATING



## Terminations

### FLANGE MOUNT TERMINATION – P/N: RPA0302T0050JNBK

#### ELECTRICAL SPECIFICATIONS

**Nominal Impedance:** 50 Ω ±5% standard  
(contact factory for custom values)

**Power:** 20 Watts

**Frequency:** DC to 18 GHz

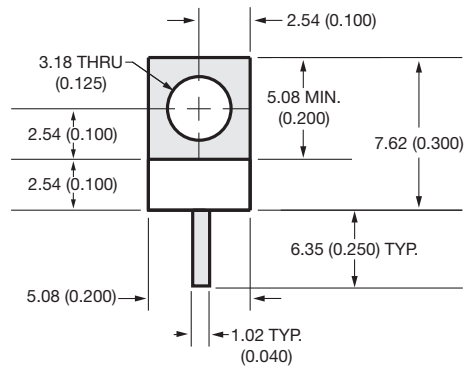
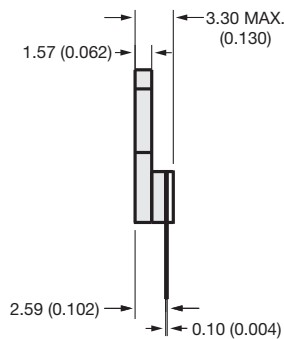
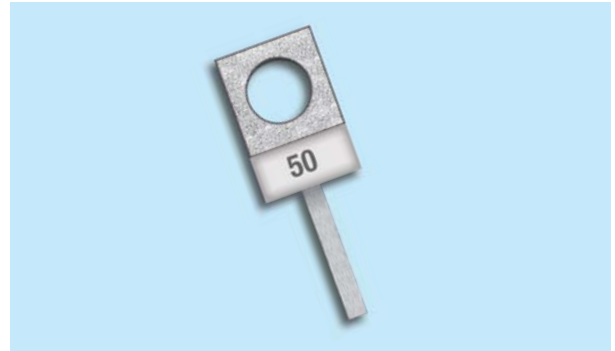
**VSWR:** 1.15:1 @ 15 GHz, 1.25:1 @ 18 GHz

**Operating Temperature Range:** -55°C to +150°C

**Temperature Coefficient:** <150 ppm/°C

**Tabs:** Silver

**RoHS Compliant**



mm (inches)

### FLANGE MOUNT TERMINATION – P/N: RPA0500T0050JNBK

#### ELECTRICAL SPECIFICATIONS

**Nominal Impedance:** 50 Ω ±5% standard  
(contact factory for custom values)

**Power:** 25 Watts

**Frequency:** DC to 6.0 GHz

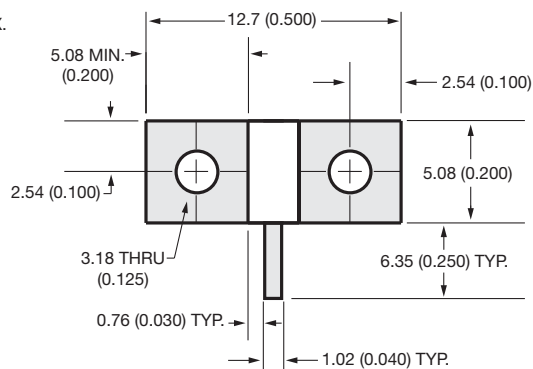
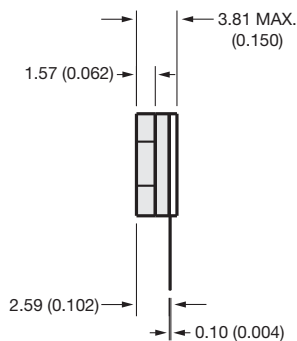
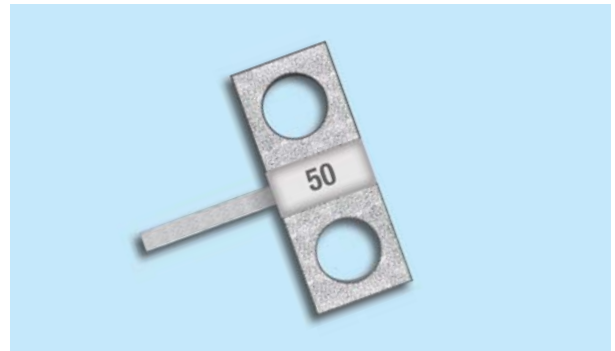
**VSWR:** 1.15:1 @ 4 GHz, 1.25:1 @ 6 GHz

**Operating Temperature Range:** -55°C to +150°C

**Temperature Coefficient:** <150 ppm/°C

**Tabs:** Silver

**RoHS Compliant**



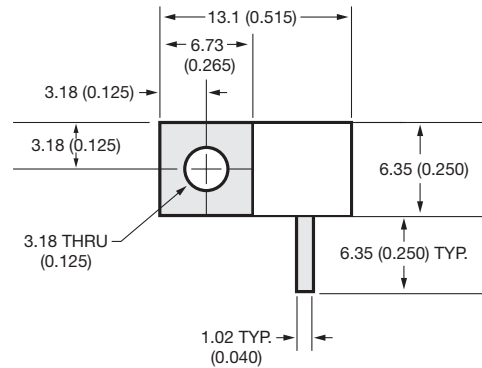
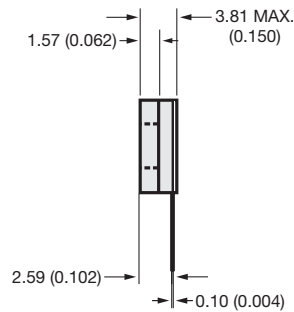
mm (inches)

For Part Number Code, see page 14.

## Terminations

### FLANGE MOUNT TERMINATION – P/N: RPA0515T0050JNBK ELECTRICAL SPECIFICATIONS

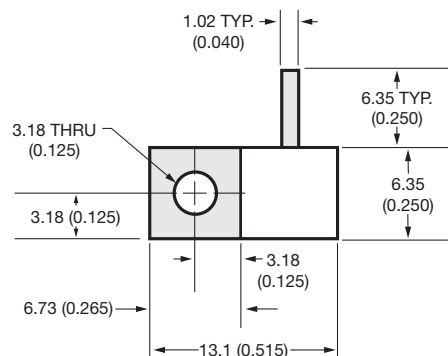
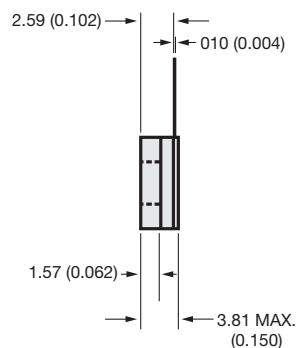
- Nominal Impedance:** 50 Ω ±5% standard  
(contact factory for custom values)
- Power:** 60 Watts
- Frequency:** DC to 6.0 GHz
- VSWR:** 1.20:1 @ 4 GHz, 1.30:1 @ 6 GHz
- Operating Temperature Range:** -55°C to +150°C
- Temperature Coefficient:** <150 ppm/°C
- Tabs:** Silver
- LRoHS Compliant**



mm (inches)

### FLANGE MOUNT TERMINATION – P/N: RPA0516T0050JNBK ELECTRICAL SPECIFICATIONS

- Nominal Impedance:** 50 Ω ±5% standard  
(contact factory for custom values)
- Power:** 60 Watts
- Frequency:** DC to 6 GHz
- VSWR:** 1.20:1 @ 4 GHz, 1.30:1 @ 6 GHz
- Operating Temperature Range:** -55°C to +150°C
- Temperature Coefficient:** <150 ppm/°C
- Tabs:** Silver
- RoHS Compliant**



mm (inches)

For Part Number Code, see page 14.

## Terminations

### FLANGE MOUNT TERMINATION – P/N: RPA0517T0050JNBK

#### ELECTRICAL SPECIFICATIONS

**Nominal Impedance:** 50 Ω ±5% standard  
(contact factory for custom values)

**Power:** 60 Watts

**Frequency:** DC to 6 GHz

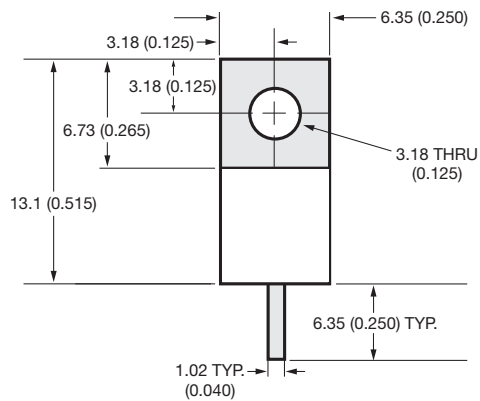
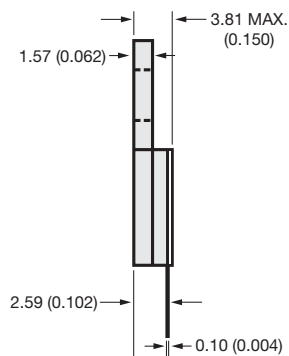
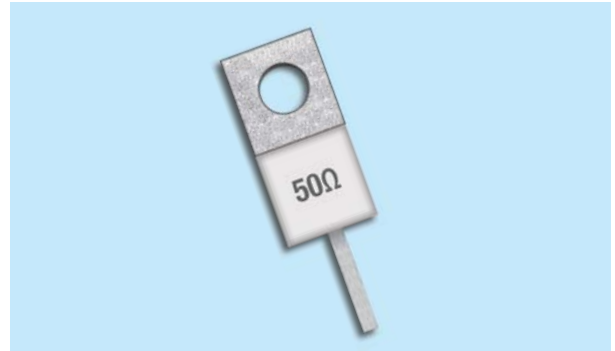
**VSWR:** 1.20:1 @ 4 GHz, 1.30:1 @ 6 GHz

**Operating Temperature Range:** -55°C to +150°C

**Temperature Coefficient:** <150 ppm/°C

**Tabs:** Silver

**RoHS Compliant**



mm (inches)

### FLANGE MOUNT TERMINATION – P/N: RPA0560T0050JNBK

#### ELECTRICAL SPECIFICATIONS

**Nominal Impedance:** 50 Ω ±5% standard  
(contact factory for custom values)

**Power:** 75 Watts

**Frequency:** DC to 4 GHz

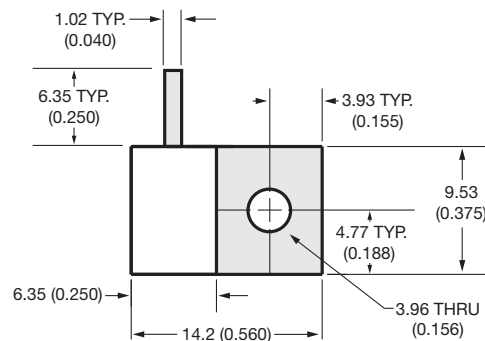
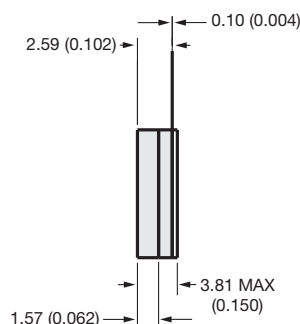
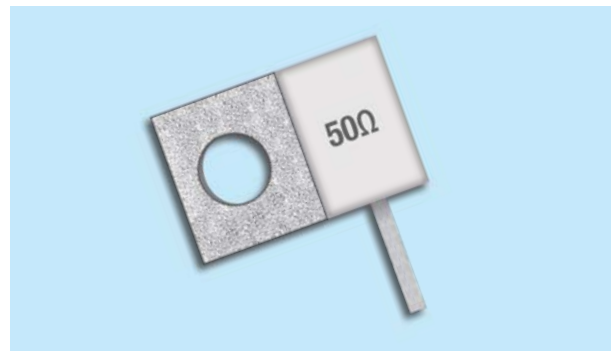
**VSWR:** 1.25:1

**Typical Operating Temperature Range:** -55°C to +150°C

**Temperature Coefficient:** <150 ppm/°C

**Tabs:** Silver

**RoHS Compliant**



mm (inches)

For Part Number Code, see page 14.

## Terminations

### FLANGE MOUNT TERMINATION – P/N: RPA0561T0050JNBK

#### ELECTRICAL SPECIFICATIONS

**Nominal Impedance:** 50 Ω ±5% standard  
(contact factory for custom values)

**Power:** 75 Watts

**Frequency:** DC to 4.0 GHz

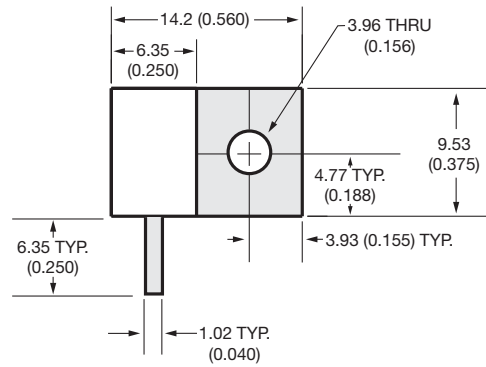
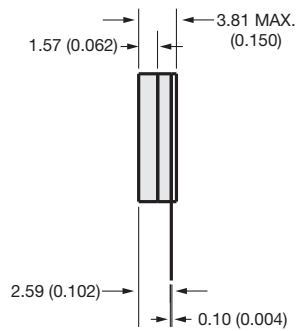
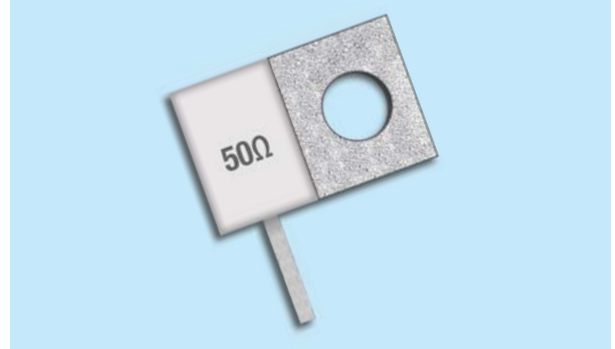
**VSWR:** 1.25:1

**Typical Operating Temperature Range:** -55°C to +150°C

**Temperature Coefficient:** <150 ppm/°C

**Tabs:** Silver

**RoHS Compliant**



mm (inches)

### FLANGE MOUNT TERMINATION – P/N: RPA0800T0050JNBK

#### ELECTRICAL SPECIFICATIONS

**Nominal Impedance:** 50 Ω ±5% standard  
(contact factory for custom values)

**Power:** 50 Watts

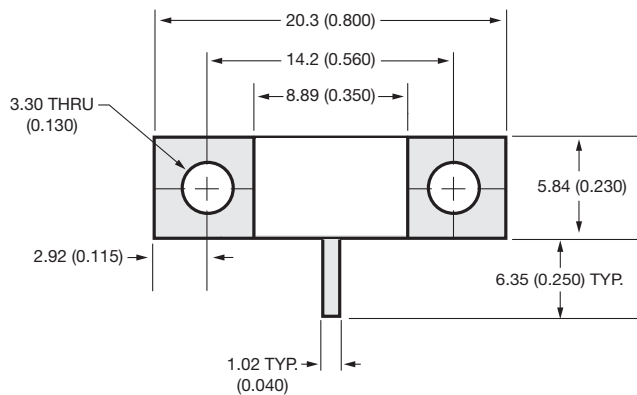
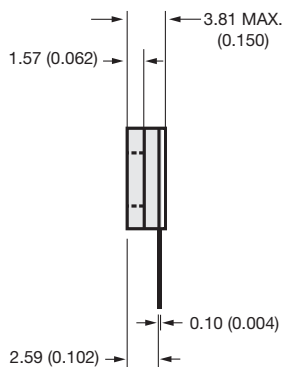
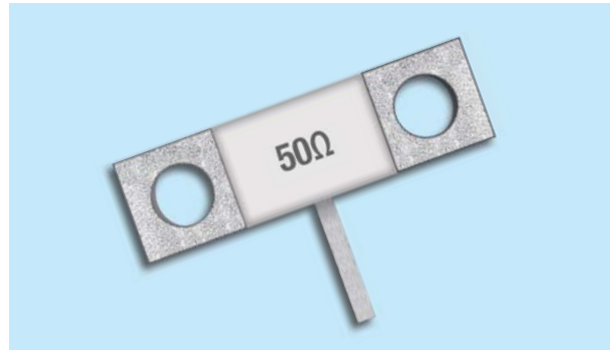
**Frequency:** DC to 6 GHz

**VSWR:** 1.10:1 @ 4.5 GHz, 1.18:1 @ 6.0GHz

**Operating Temperature Range:** -55°C to +150°C

**Tabs:** Silver

**RoHS Compliant**



mm (inches)

For Part Number Code, see page 14.

## Terminations

### FLANGE MOUNT TERMINATION – P/N: RPA0870T0050JNBK ELECTRICAL SPECIFICATIONS

**Nominal Impedance:** 50 Ω ±5% standard  
(contact factory for custom values)

**Power:** 100 Watts

**Frequency:** DC to 4.0 GHz

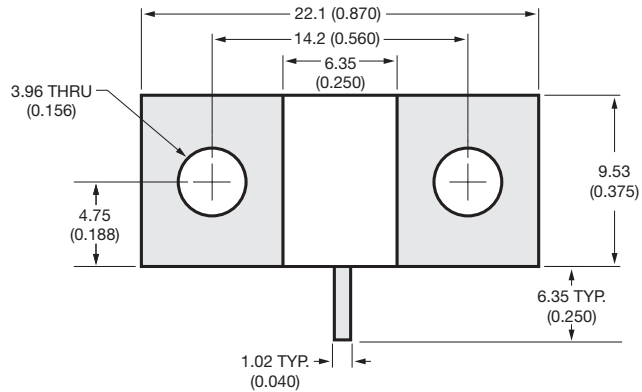
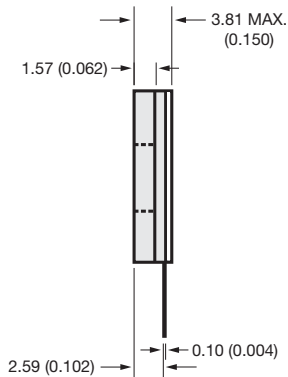
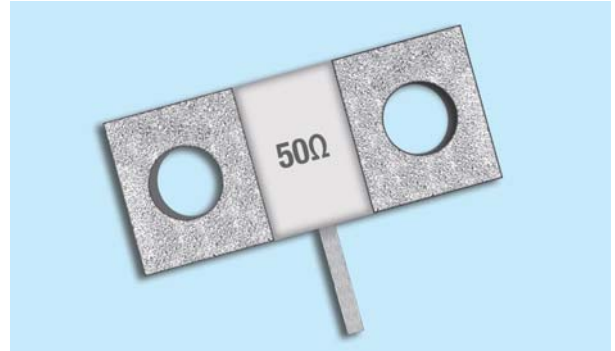
**VSWR:** 1.20:1

**Typical Operating Temperature Range:** -55°C to +150°C

**Temperature Coefficient:** <150 ppm/°C

**Tabs:** Silver

**RoHS Compliant**



mm (inches)

### FLANGE MOUNT TERMINATION – P/N: RPA0300T0050JNBK ELECTRICAL SPECIFICATIONS

**Nominal Impedance:** 50 Ω ±5% standard  
(contact factory for custom values)

**Power:** 20 Watts

**Frequency:** DC to 6 GHz

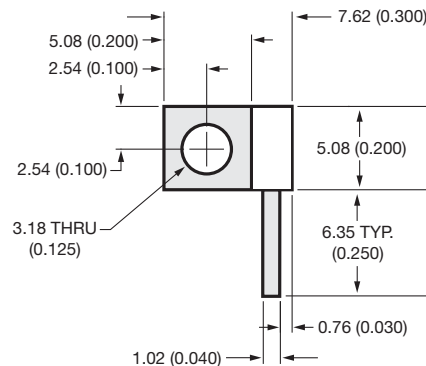
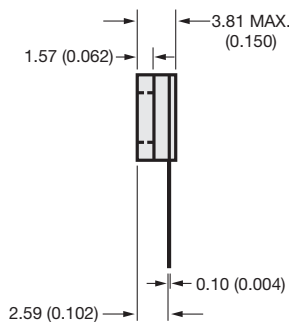
**VSWR:** 1.15:1 @ 4 GHz, 1.25:1 @ 6 GHz,

**Operating Temperature Range:** -55°C to +150°C

**Temperature Coefficient:** <150 ppm/°C

**Tabs:** Silver

**RoHS Compliant**



mm (inches)

For Part Number Code, see page 14.

## Terminations

### FLANGE MOUNT TERMINATION – P/N: RPA0301T0050JNBK

#### ELECTRICAL SPECIFICATIONS

**Nominal Impedance:** 50  $\Omega$   $\pm$ 5% standard  
(contact factory for custom values)

**Power:** 20 Watts

**Frequency:** DC to 6 GHz

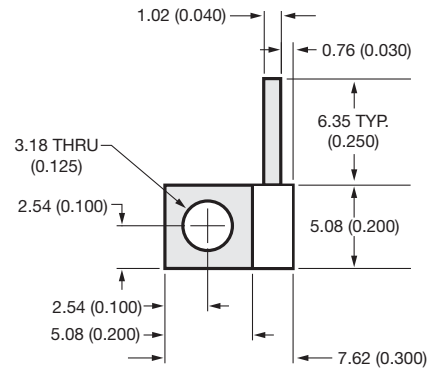
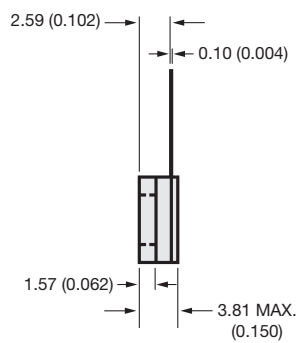
**VSWR:** 1.15:1 @ 4 GHz, 1.25:1 @ 6 GHz,

**Operating Temperature Range:** -55°C to +150°C

**Temperature Coefficient:** <150 ppm/°C

**Tabs:** Silver

**RoHS Compliant**



mm (inches)

# High Power Resistive Products

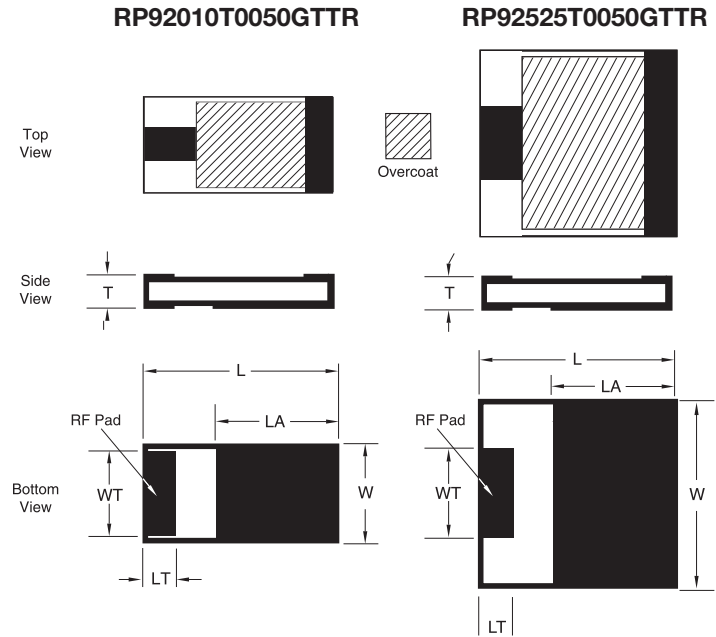


## Terminations

### SURFACE MOUNT CHIP TERMINATIONS – RP9 SERIES

#### GENERAL SPECIFICATIONS

- Nominal Impedance:** 50 Ω
- Resistive Tolerance:** ±2% standard
- Operating Temp Range:** -55°C to +150°C
- Temperature Coefficient:** ±150 ppm/°C
- Resistive Elements:** Tantalum, Thin Film Processed
- Substrate Material:** Aluminum Nitride
- Terminals:** Silver over Nickel
- RoHS Compliant**
- Tape and Reel Specifications:** See Page 38



mm (inches)

AVX Part Number	W ±0.25 (0.010)	L ±0.25 (0.010)	T ±0.13 (0.005)	LT ±0.13 (0.005)	WT ±0.13 (0.005)	LA ±0.13 (0.005)	Frequency Range (GHz)	VSWR (Typ.)	Power Max** (Watts)
RP92010T0050GTRR	2.54 (0.100)	5.08 (0.200)	1.02 (0.040)	1.02 (0.040)	2.29 (0.090)	2.92 (0.115)	DC - 3.0	1.20:1	10W
RP92525T0050GTRR	6.22 (0.245)	6.22 (0.245)	1.02 (0.040)	0.76 (0.030)	3.18 (0.125)	4.32 (0.170)	DC - 4.0	1.25:1	20W

\*\* Test Condition: Chip soldered to a via patch on a 30-mil-thick Rogers RO4350 board; Land surfaces at 100°C; maximum rated power applied.

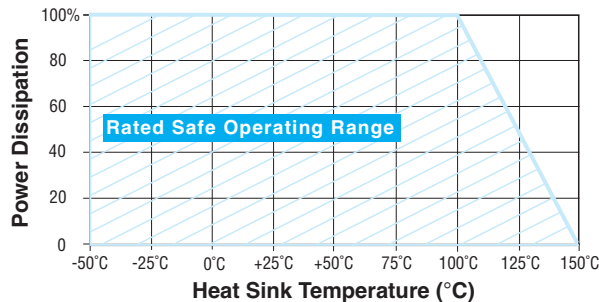
#### HOW TO ORDER

- RP9** AVX Series
- 2010** Case Size  
See chart above
- T** Type  
T = Termination
- 0050** Value  
0050 = 50Ω
- G** Tolerance  
J = ±5%  
G = ±2%
- T** Terminal  
T = Silver over Nickel
- TR** Packaging  
TR = Tape & Reel



Contact factory for custom ratings and sizes.

#### POWER DERATING





# High Power Resistive Products

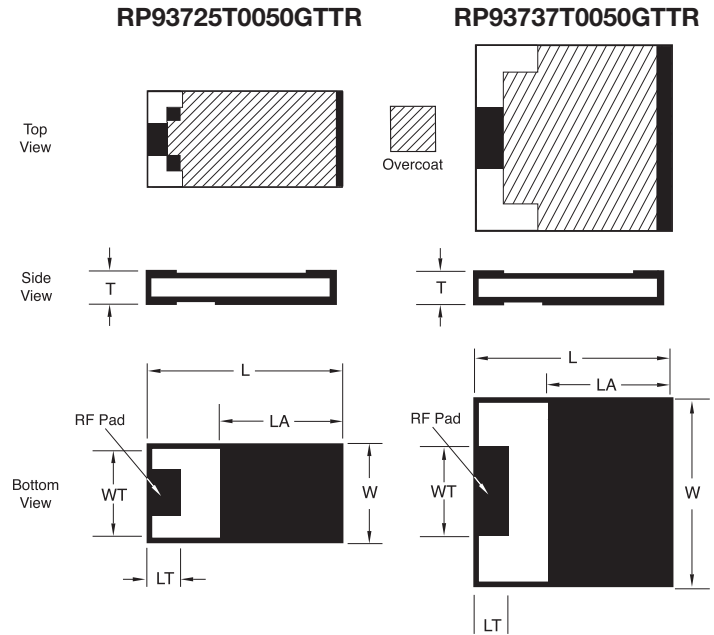


## Terminations

### SURFACE MOUNT CHIP TERMINATIONS – RP9 SERIES

#### GENERAL SPECIFICATIONS

- Nominal Impedance:** 50 Ω
- Resistive Tolerance:** ±2% standard
- Operating Temp Range:** -55°C to +150°C
- Temperature Coefficient:** ±150 ppm/°C
- Resistive Elements:** Tantalum, Thin Film Processed
- Substrate Material:** Aluminum Nitride
- Terminals:** Silver over Nickel
- RoHS Compliant**
- Tape and Reel Specifications:** See Page 38



mm (inches)

AVX Part Number	W ±0.25 (0.010)	L ±0.25 (0.010)	T ±0.13 (0.005)	LT ±0.13 (0.005)	WT ±0.13 (0.005)	LA ±0.13 (0.005)	Frequency Range (GHz)	VSWR (Typ.)	Power Max** (Watts)
RP93725T0050GTTR	6.35 (0.250)	9.53 (0.375)	1.02 (0.040)	1.27 (0.050)	3.18 (0.125)	6.60 (0.260)	DC - 2.2	1.20:1	30W
RP93737T0050GTTR	9.40 (0.370)	9.40 (0.370)	1.02 (0.040)	1.27 (0.050)	3.18 (0.125)	6.99 (0.275)	DC - 3.0	1.25:1	40W

\*\* Test Condition: Chip soldered to a via patch on a 30-mil-thick Rogers RO4350 board; Land surfaces at 100°C; maximum rated power applied.

#### HOW TO ORDER

<b>RP9</b>   AVX Series	<b>2010</b>   Case Size See chart above	<b>T</b>   Type T = Termination	<b>0050</b>   Value 0050 = 50Ω	<b>G</b>   Tolerance J = ±5% G = ±2%	<b>T</b>   Terminal T = Silver over Nickel	<b>TR</b>   Packaging TR = Tape & Reel
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Contact factory for custom ratings and sizes.

#### POWER DERATING

