

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 designed to meet MIL-PRF-55342.

ELECTRICAL SPECIFICATIONS

Resistance: 50 and 100 Ω standard (10 Ω - 200 Ω available)

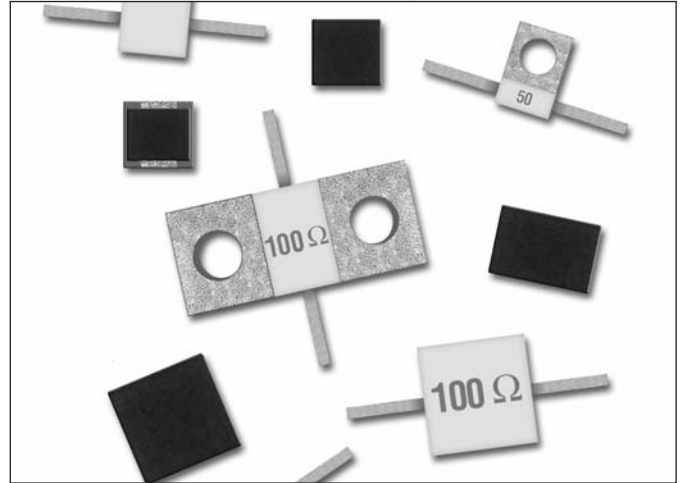
Resistance Tolerance: $\pm 5\%$ standard ($\pm 2\%$ available)

Power: 2 Watts through 250 Watts

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

Temperature Coefficient: < 150 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: ± 0.13 (0.005)

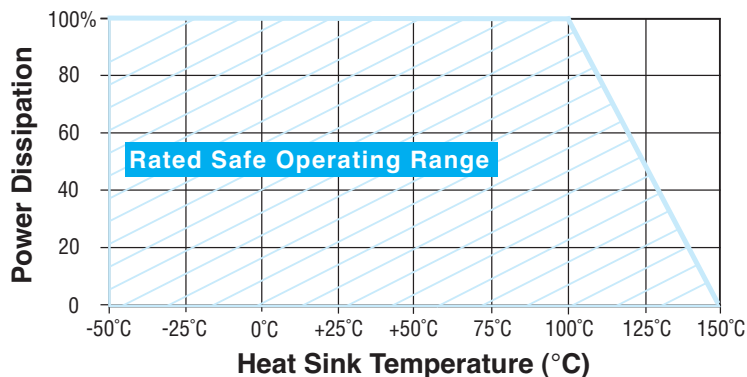
SMT and Chip products, supplied on Tape and Reel

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

RoHS Compliant



POWER DERATING



High Power Resistive Products

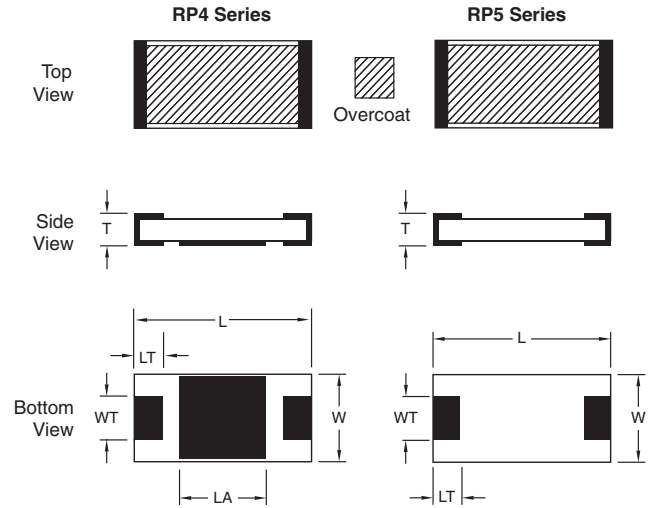


Resistors

SURFACE MOUNT CHIP RESISTORS – RP4 AND RP5 SERIES

GENERAL SPECIFICATIONS

- Resistance:** 50 and 100 Ω standard (contact factory for custom resistance values)
- Resistive Tolerance:** ±2% standard
- Operating Temp Range:** -55°C to +150°C
- Temperature Coefficient:** <150 ppm/°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

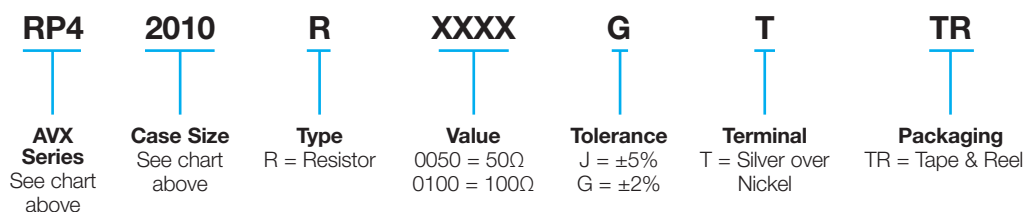


mm (inches)

AVX Part Number*	W ±0.25 (0.010)	L ±0.25 (0.010)	T ±0.13 (0.005)	WT ±0.13 (0.005)	LT ±0.13 (0.005)	LA ±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

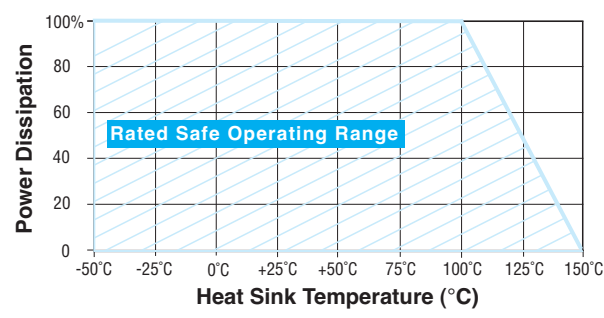
* xxxx denotes Ohm value.
 ** Test Condition: Chip soldered to a via patch on a 30-mil-thick Rogers RO4350 board; Land surfaces at 100°C; maximum rated power applied.
 Specification: The resistance of the film shall change no more than 0.5% during and after a 1000-hr. Burn-in per Mil-PRF-55342.

HOW TO ORDER



Contact factory for custom ratings and sizes.

POWER DERATING



High Power Resistive Products

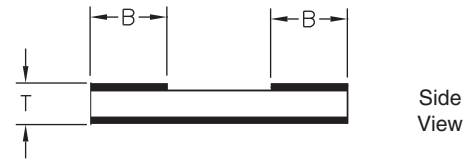
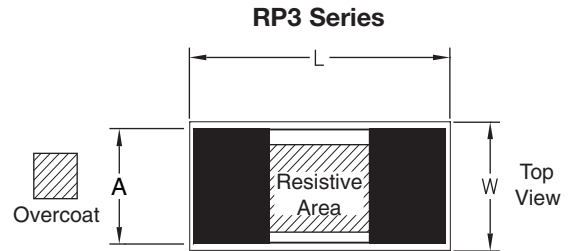


Resistors

CHIP RESISTORS – RP3 SERIES

GENERAL SPECIFICATIONS

- Resistance:** 50 and 100 Ω standard (contact factory for custom resistance values)
- Resistive Tolerance:** $\pm 5\%$ standard (2% available)
- Operating Temp Range:** -55°C to $+150^{\circ}\text{C}$
- Temperature Coefficient:** <150 ppm/ $^{\circ}\text{C}$
- Resistive Elements:** Proprietary Thin Film
- Substrate Material:** Aluminum Nitride
- Terminals:** Silver
- RoHS Compliant**
- Reliability:** In accordance with MIL-PRF-55342
- Non-Magnetic**
- Tape and Reel Specifications:** See Page 37



mm (inches)

AVX Part Number*	W ± 0.25 (0.010)	L ± 0.25 (0.010)	T ± 0.13 (0.005)	A ± 0.13 (0.005)	B (Typ.)	Capacitance (pF)	Power Max** (Watts)
RP31005RxxxxJTTR	1.27 (0.050)	2.54 (0.100)	0.64 (0.025)	1.14 (0.045)	0.51 (0.020)	.75	5W
RP31206RxxxxJTTR	1.52 (0.060)	3.05 (0.120)	0.64 (0.025)	1.40 (0.055)	0.51 (0.020)	.90	15W
RP32010RxxxxJTTR	2.54 (0.100)	5.08 (0.200)	1.02 (0.040)	2.29 (0.090)	0.51 (0.020)	1.0	30W
RP32525RxxxxJTTR	6.22 (0.245)	6.22 (0.245)	1.02 (0.040)	3.30 (0.130)	0.51 (0.020)	2.0	60W
RP33725RxxxxJTTR	6.35 (0.250)	9.53 (0.375)	1.02 (0.040)	5.03 (0.198)	0.64 (0.025)	4.15	150W
RP33737RxxxxJTTR	9.40 (0.370)	9.40 (0.370)	1.02 (0.040)	8.38 (0.330)	0.64 (0.025)	6.0	250W

* xxxx denotes Ohm value.

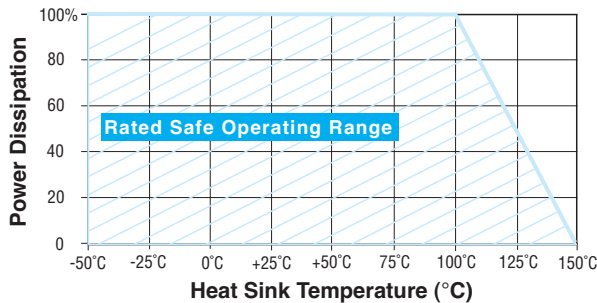
** Test Condition: Chip soldered to a large copper carrier whose surface is at 100°C ; maximum rated power applied. Specification: The resistance of the film shall change no more than 0.5% during and after a 1000-hr. Burn-in per Mil-PRF-55342.

HOW TO ORDER



Contact factory for custom ratings and sizes.

POWER DERATING

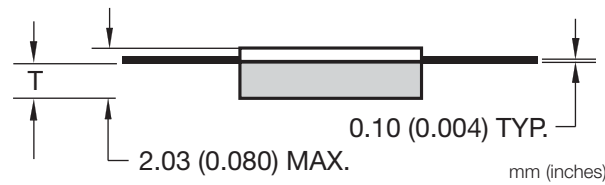
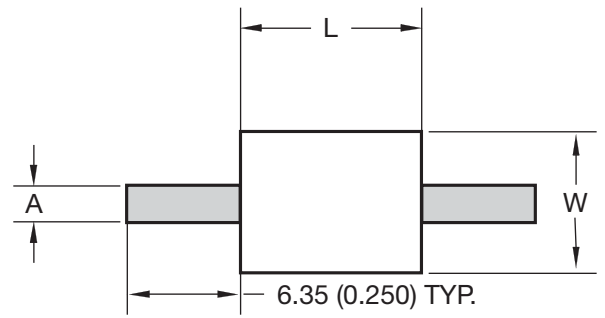


Resistors

LEADED CHIP RESISTORS – RP7 SERIES

GENERAL SPECIFICATIONS

- Resistance:** 50 and 100 Ω standard
(contact factory for custom resistance values)
- Resistive Tolerance:** $\pm 5\%$ standard (2% available)
- Operating Temp. Range:** -55°C to $+150^{\circ}\text{C}$
- Temperature Coefficient:** <150 ppm/ $^{\circ}\text{C}$
- Resistive Elements:** Proprietary Thin Film
- Substrate Material:** Aluminum Nitride
- Lead Terminals:** Silver
- Cover:** Alumina
- RoHS Compliant**
- Reliability:** In accordance with MIL-PRF-55342
- Non-Magnetic**

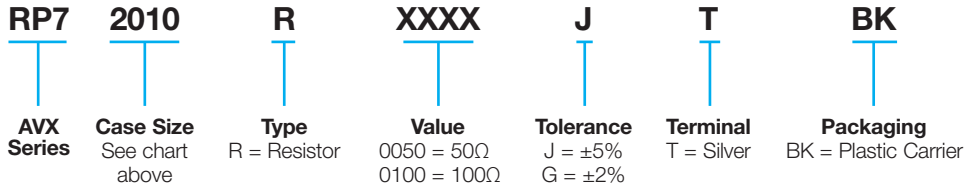


mm (inches)

AVX Part Number*	W ± 0.25 (0.010)	L ± 0.25 (0.010)	T ± 0.13 (0.005)	A	Capacitance (pF)	Power Max** (Watts)
RP72010RxxxxJTbk	2.54 (0.100)	5.08 (0.200)	1.02 (0.040)	1.02 (0.040)	1.0	30W
RP72335RxxxxJTbk	8.89 (0.350)	5.84 (0.230)	1.02 (0.040)	1.02 (0.040)	3.15	50W
RP72525RxxxxJTbk	6.45 (0.245)	6.22 (0.245)	1.02 (0.040)	1.02 (0.040)	2.0	60W
RP73725RxxxxJTbk	6.35 (0.250)	9.53 (0.375)	1.02 (0.040)	1.02 (0.040)	4.15	150W
RP73737RxxxxJTbk	9.40 (0.370)	9.40 (0.370)	1.02 (0.040)	1.02 (0.040)	6.0	250W

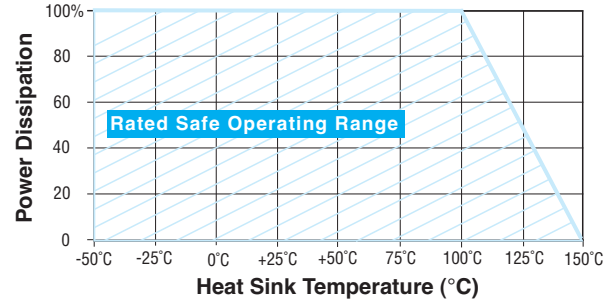
* xxxx denotes Ohm value.
 ** Test Condition: Chip soldered to a large copper carrier whose surface is at 100°C ; maximum rated power applied. Specification: The resistance of the film shall change no more than 0.5% during and after a 1000-hr. Burn-in per Mil-PRF-55342.

HOW TO ORDER



Contact factory for custom ratings and sizes.

POWER DERATING



High Power Resistive Products



Resistors

FLANGE MOUNT RESISTOR – P/N: RP60300RXXXXJNBK

ELECTRICAL SPECIFICATIONS

Resistance: 50 and 100 Ω standard
(other resistance values available)

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

Power: 20 Watts

Capacitance: 1.0 pF

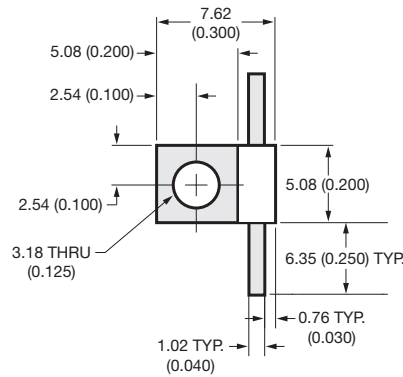
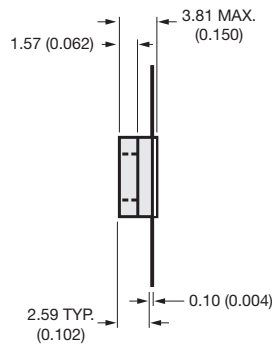
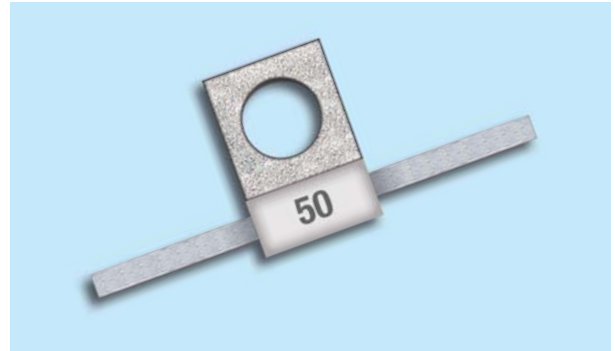
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

Tabs: Silver

RoHS Compliant

Non-Magnetic available



mm (inches)

FLANGE MOUNT RESISTOR – P/N: RP60302RXXXXJNBK

ELECTRICAL SPECIFICATIONS

Resistance: 50 and 100 Ω standard
(other resistance values available)

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

Power: 20 Watts

Capacitance: 1.0pF

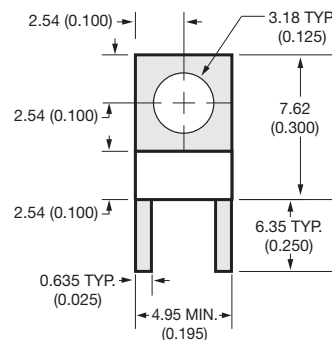
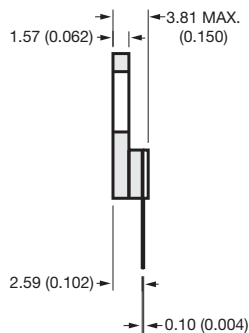
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

Tabs: Silver

RoHS Compliant

Non-Magnetic available



mm (inches)

For Part Number Code, see page 8.



High Power Resistive Products



Resistors

FLANGE MOUNT RESISTOR – P/N: RP60500RXXXXJNBK

ELECTRICAL SPECIFICATIONS

Resistance: 50 and 100 Ω standard
(other resistance values available)

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

Power: 25 Watts

Capacitance: 1.0pF

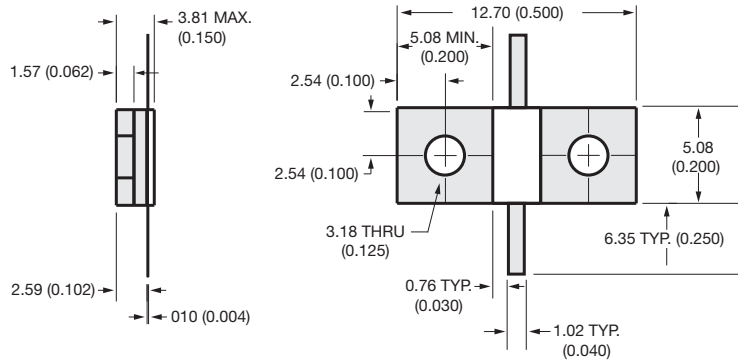
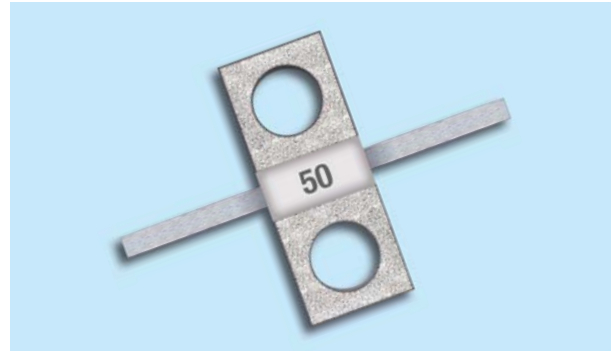
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

Tabs: Silver

RoHS Compliant

Non-Magnetic available



mm (inches)

FLANGE MOUNT RESISTOR – P/N: RP60515RXXXXJNBK

ELECTRICAL SPECIFICATIONS

Resistance: 50 and 100 Ω standard
(other resistance values available)

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

Power: 60 Watts

Capacitance: 2.0 pF

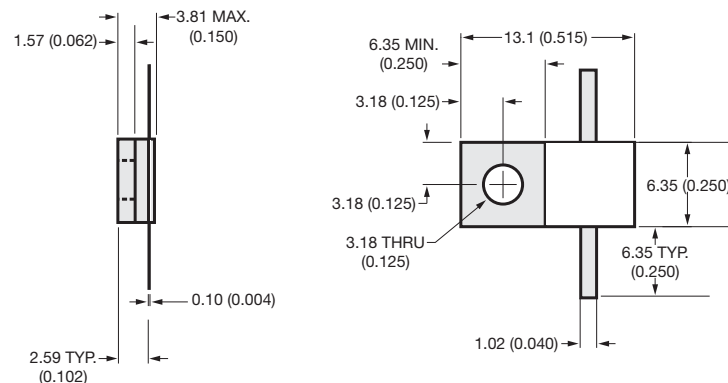
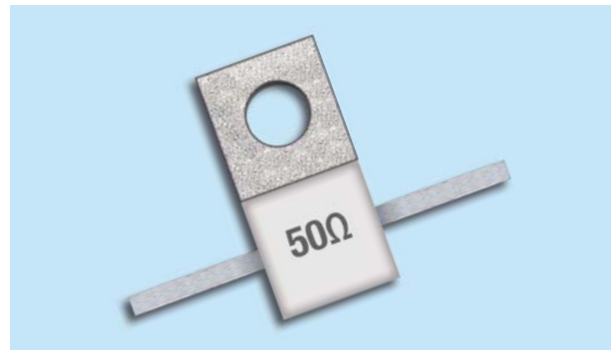
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

Tabs: Silver

RoHS Compliant

Non-Magnetic available



mm (inches)

For Part Number Code, see page 8.



High Power Resistive Products



Resistors

FLANGE MOUNT RESISTOR – P/N: RP60517RXXXJNBK

ELECTRICAL SPECIFICATIONS

Resistance: 50 and 100 Ω standard
(other resistance values available)

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

Power: 60 Watts

Capacitance: 2.2 pF

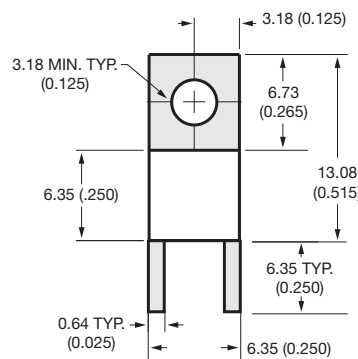
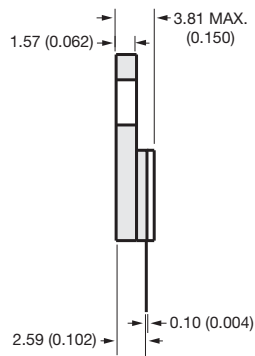
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

Tabs: Silver

RoHS Compliant

Non-Magnetic available



mm (inches)

FLANGE MOUNT RESISTOR – P/N: RP60560RXXXJNBK

ELECTRICAL SPECIFICATIONS

Resistance: 50 and 100 Ω standard
(other resistance values available)

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

Power: 75 Watts

Capacitance: 4.15 pF

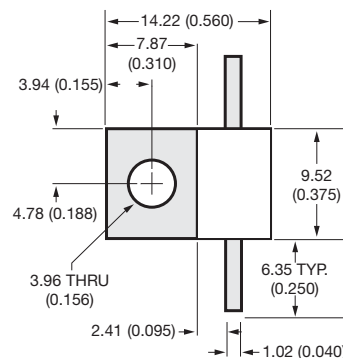
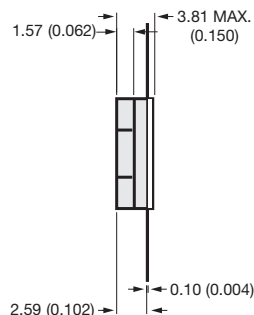
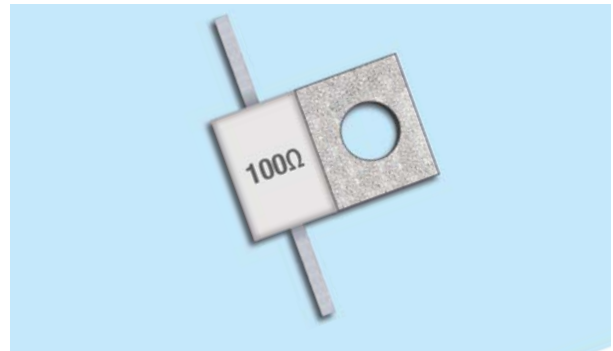
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

Tabs: Silver

RoHS Compliant

Non-Magnetic available



mm (inches)

For Part Number Code, see page 8.



High Power Resistive Products



Resistors

FLANGE MOUNT RESISTOR – P/N: RP60562RXXXXJNBK

ELECTRICAL SPECIFICATIONS

Resistance: 50 and 100 Ω standard
(other resistance values available)

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

Power: 75 Watts

Capacitance: 4.15 pF

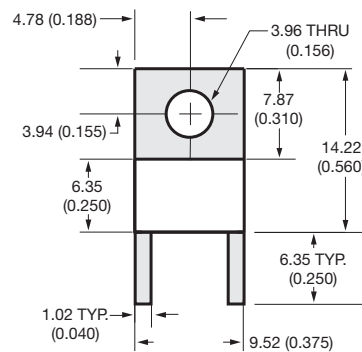
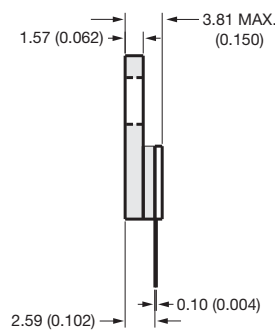
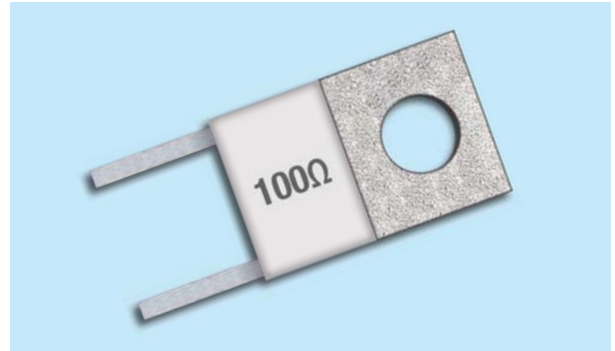
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

Tabs: Silver

RoHS Compliant

Non-Magnetic available



mm (inches)

FLANGE MOUNT RESISTOR – P/N: RP60800RXXXXJNBK

ELECTRICAL SPECIFICATIONS

Resistance: 50 and 100 Ω standard
(other resistance values available)

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

Power: 100 Watts

Capacitance: 3.10 pF

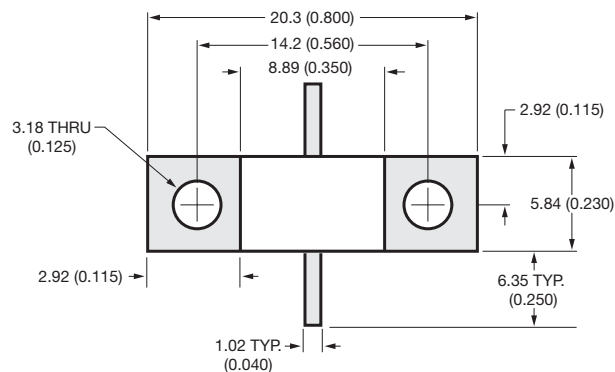
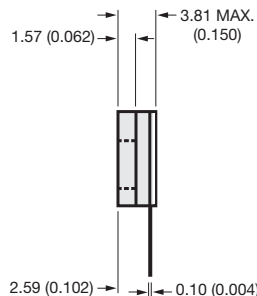
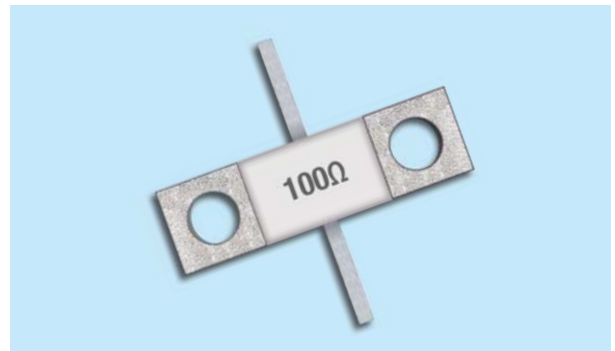
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

Tabs: Silver

RoHS Compliant

Non-Magnetic available



mm (inches)

For Part Number Code, see page 8.



High Power Resistive Products



Resistors

FLANGE MOUNT RESISTORS GENERAL SPECIFICATIONS

Resistance: 50 and 100 Ω standard
(contact factory for custom resistance values)

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

Power: 20-250 Watts

Capacitance: 1.0 pF

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

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

HOW TO ORDER

RP6	0300	R	0100	J	N	BK
AVX Series	Case Size	Type R = Resistor	Value 0050 = 50 Ω 0100 = 100 Ω	Tolerance J = $\pm 5\%$ (G = $\pm 2\%$ available Consult Factory)	Terminal N = Silver	Packaging BK = Plastic Carrier

Contact factory for custom ratings and sizes.

POWER DERATING

