

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)

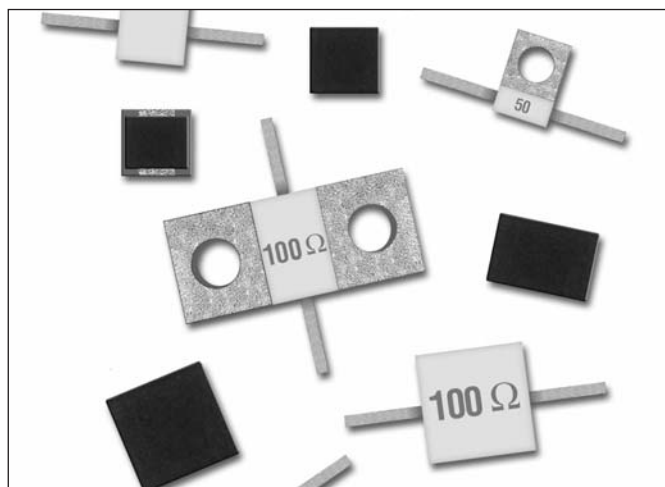
Resistance Tolerance: $\pm 5\%$ standard ($\pm 2\%$ available)

Power: 2 Watts through 250 Watts

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

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

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: ± 0.13 (0.005)

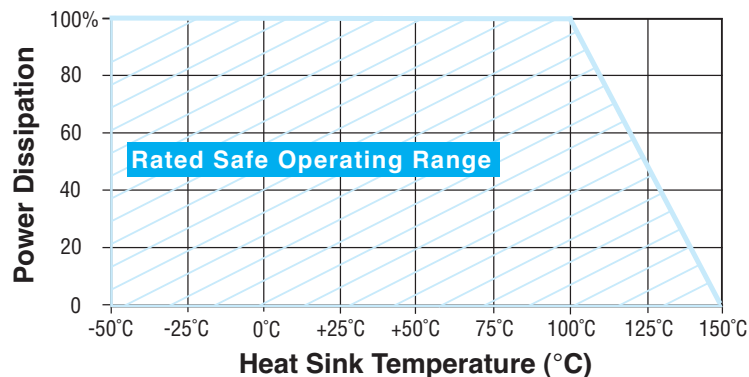
SMT and Chip products, supplied on Tape and Reel

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: $\pm 2\%$ standard

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

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

Resistive Elements: Proprietary Thin Film

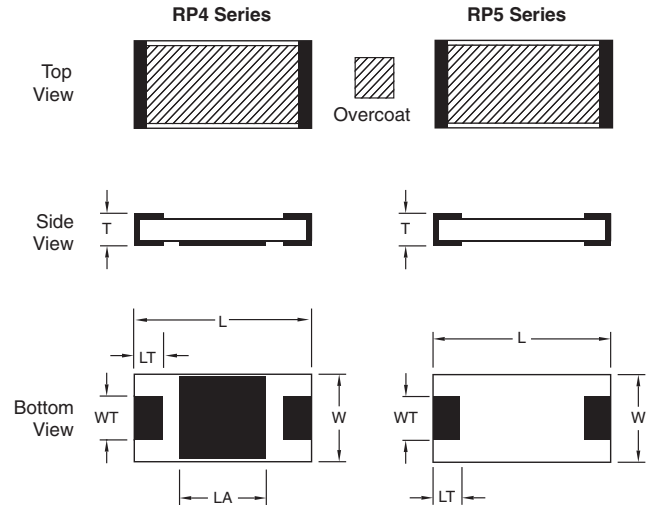
Substrate Material: Aluminum Nitride

Terminals: Silver 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.

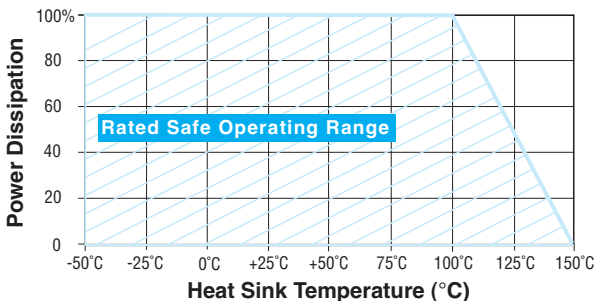
** Test Condition: Chip soldered to a via patch on a 30-mil-thick Rogers RO4350 board; Land surfaces at 100°C ; maximum rated power applied.
Specification: The resistance of the film shall change no more than 0.5% during and after a 1000-hr. Burn-in per Mil-PRF-55342.

HOW TO ORDER

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

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

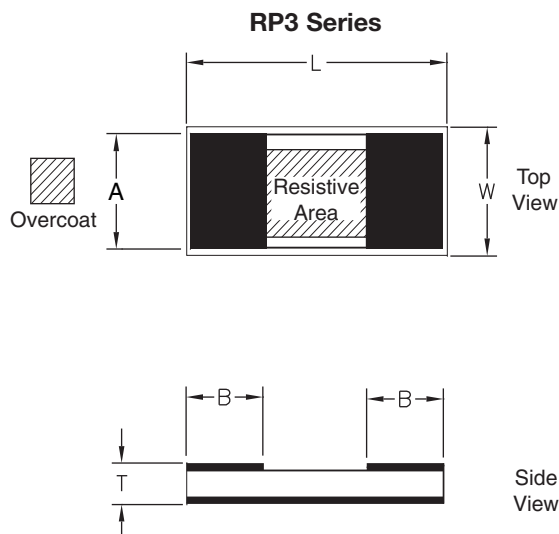
Terminals: Silver

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.

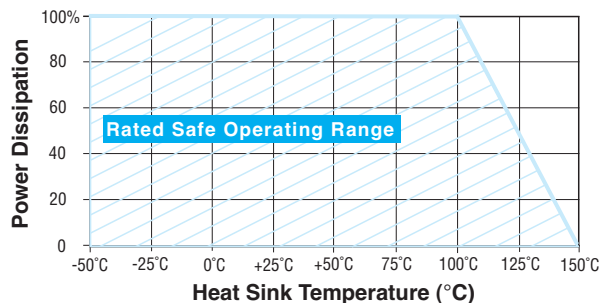
** Test Condition: Chip soldered to a large copper carrier whose surface is at 100°C ; maximum rated power applied. Specification: The resistance of the film shall change no more than 0.5% during and after a 1000-hr. Burn-in per Mil-PRF-55342.

HOW TO ORDER

RP3	2010	R	XXXX	J	T	TR
AVX Series	Case Size See chart above	Type R = Resistor	Value 0050 = 50 Ω 0100 = 100 Ω	Tolerance J = $\pm 5\%$ G = $\pm 2\%$	Terminal T = Silver	Packaging TR = Tape & Reel

Contact factory for custom ratings and sizes.

POWER DERATING



High Power Resistive Products



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

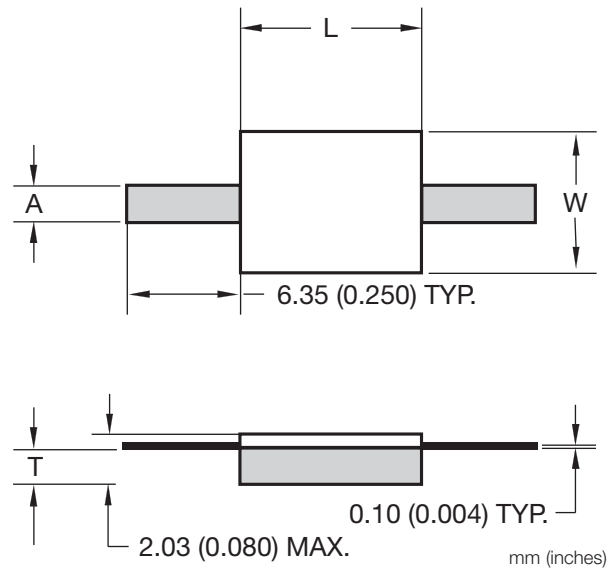
Lead Terminals: Silver

Cover: Alumina

RoHS Compliant

Reliability: In accordance with MIL-PRF-55342

Non-Magnetic



AVX Part Number*	W $\pm 0.25 (0.010)$	L $\pm 0.25 (0.010)$	T $\pm 0.13 (0.005)$	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.

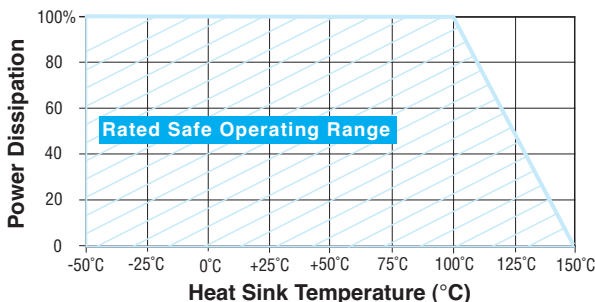
** Test Condition: Chip soldered to a large copper carrier whose surface is at 100°C ; maximum rated power applied. Specification: The resistance of the film shall change no more than 0.5% during and after a 1000-hr. Burn-in per Mil-PRF-55342.

HOW TO ORDER

RP7	2010	R	XXXX	J	T	BK
AVX Series	Case Size See chart above	Type R = Resistor	Value 0050 = 50 Ω 0100 = 100 Ω	Tolerance J = $\pm 5\%$ G = $\pm 2\%$	Terminal T = Silver	Packaging BK = Plastic Carrier

Contact factory for custom ratings and sizes.

POWER DERATING



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

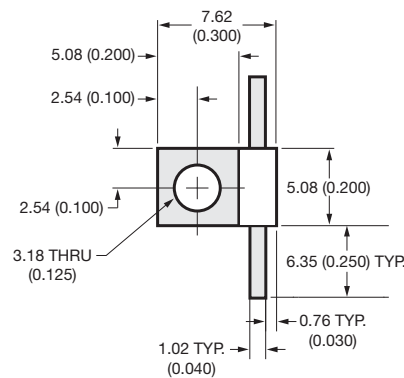
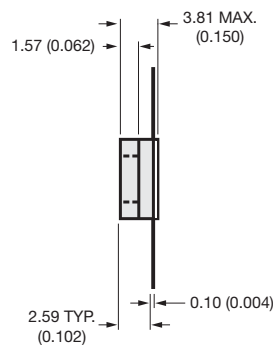
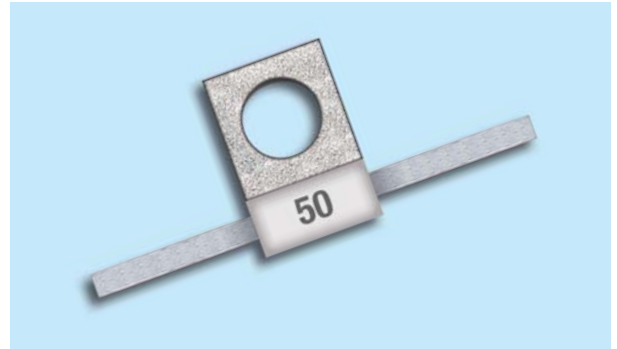
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

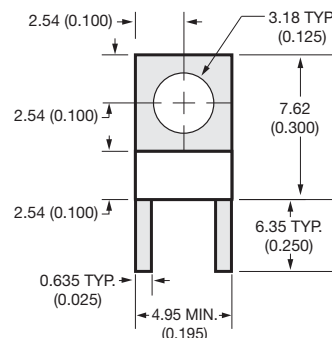
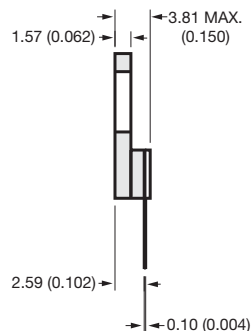
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

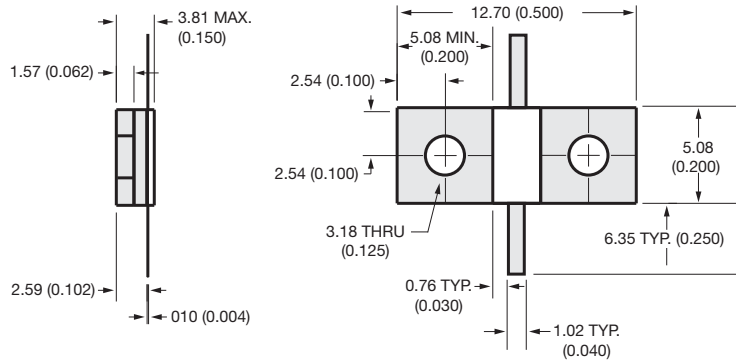
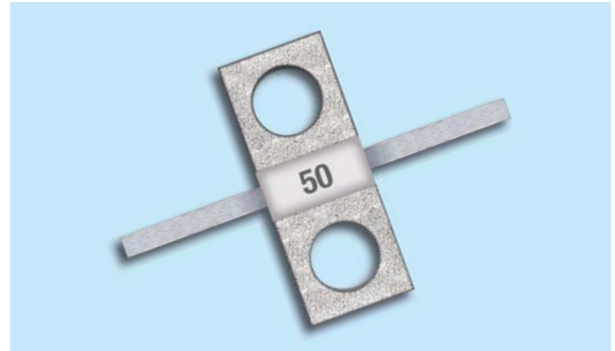
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

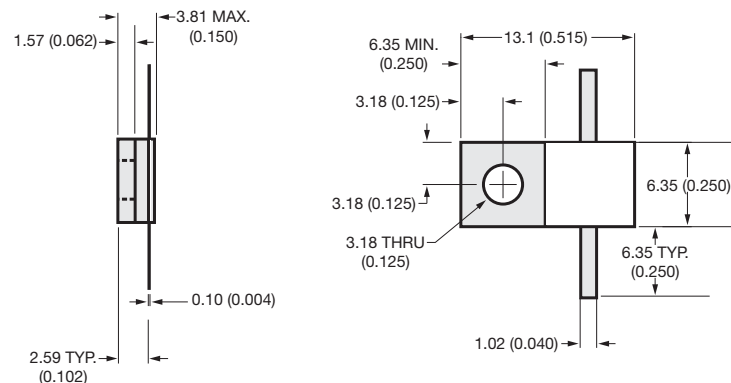
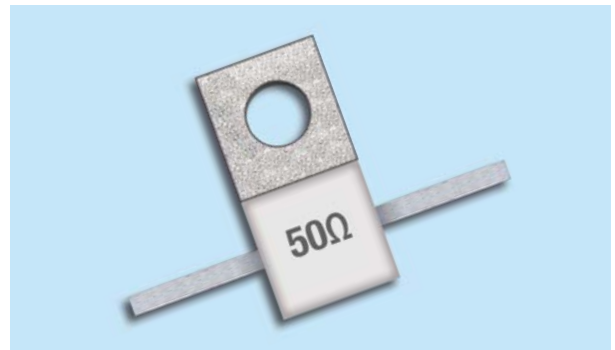
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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: RP60517RXXXXJNBK

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

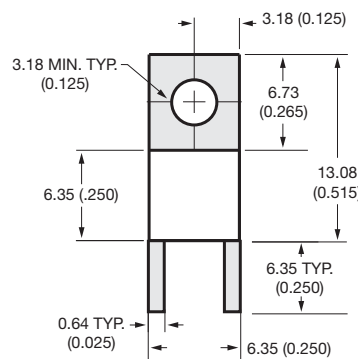
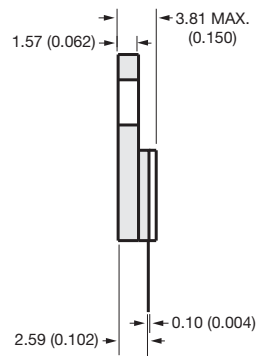
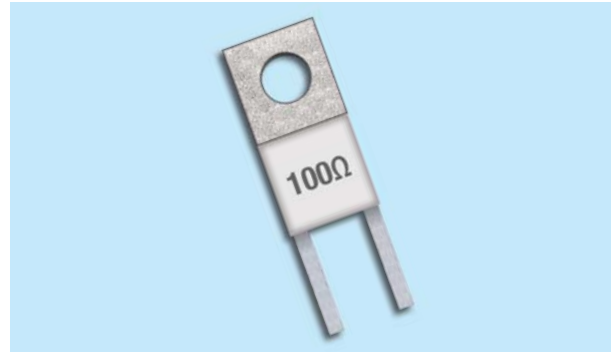
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

Tabs: Silver

RoHS Compliant

Non-Magnetic available



mm (inches)

FLANGE MOUNT RESISTOR – P/N: RP60560RXXXXJNBK

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

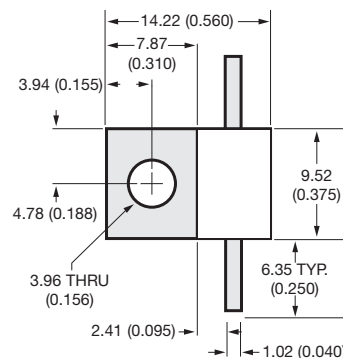
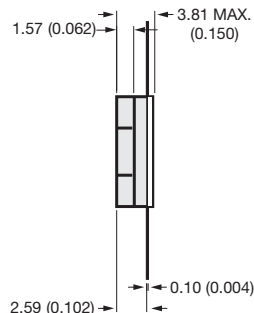
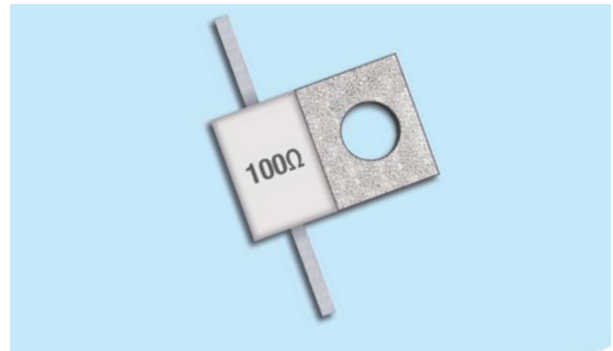
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

Tabs: Silver

RoHS Compliant

Non-Magnetic available



mm (inches)

For Part Number Code, see page 8.



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

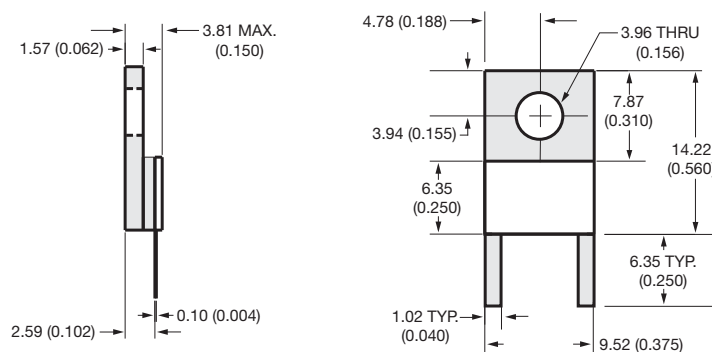
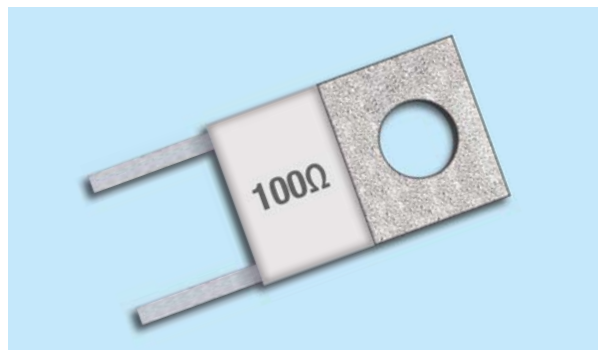
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

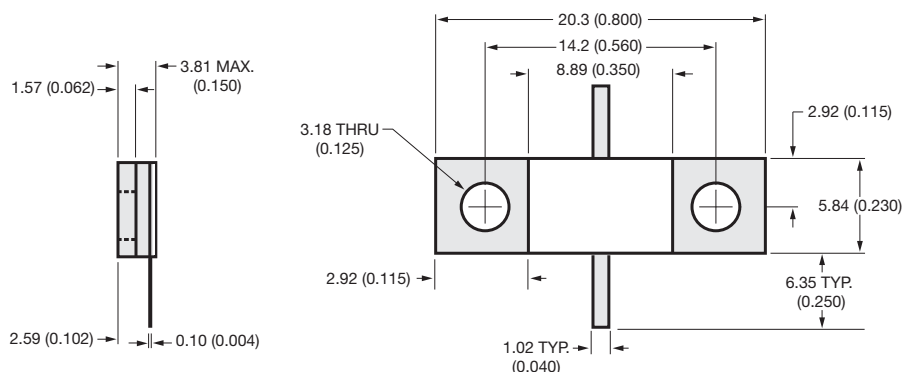
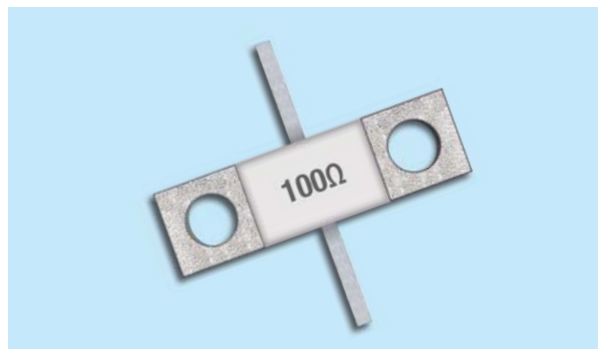
Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

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

AVX
Series

0300

Case Size

R

Type
R = Resistor

0100

Value
0050 = 50 Ω
0100 = 100 Ω

J

Tolerance
J = $\pm 5\%$
(G = $\pm 2\%$ available
Consult Factory)

N

Terminal
N = Silver

BK

Packaging
BK = Plastic Carrier

Contact factory for custom ratings and sizes.

POWER DERATING

