

High Power Resistive Products



Attenuators

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

ELECTRICAL SPECIFICATIONS

Attenuation: 1 dB through 30 dB

Frequency Range: DC to 3 GHz

Input Power: up to 150 Watts

Operating Temperature Range: -55°C through +150°C

MECHANICAL SPECIFICATIONS

Package: Leaded and Flange Mounted

Substrate Material: Aluminum Nitride

Process: 100% Thin Film Processed

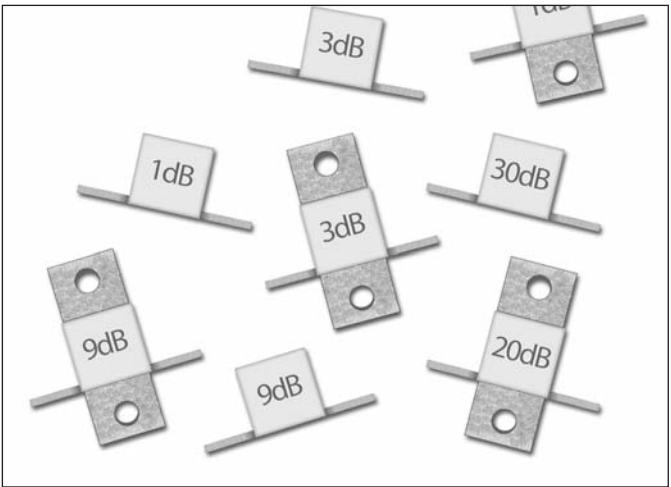
Resistive Material: Tantalum Nitride

Terminals: 100% Ag

Cover: Alumina

Mounting Flange: 100% Cu, Ni or Ag Plated

RoHS Compliant



HOW TO ORDER

RP2

AVX Series
RP1
RP2

3740

Case Size
3740
0975

A

Type
A = Attenuator

01DB

Nominal Attenuation (dB)
See chart

F

Tolerance
F = 1%

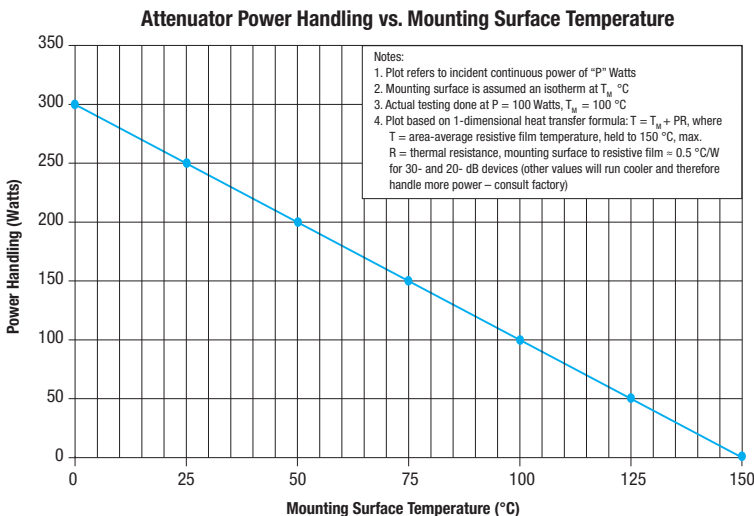
P

Plating
P = Palladium

BK

Packaging
BK = Bulk

Contact factory for custom ratings and sizes.



* Test Condition: With mounting surface temperature = 75°C, max. (see plot above). Actual test conditions are as follows: Flange attached to a large copper carrier whose surface, directly under the flange center, is held at 100°C; power applied = 100 Watts.

** Attenuation vs. frequency as a function of temperature, -55°C to +125°C

Attenuators

FLANGE MOUNT ATTENUATORS – RP1 SERIES

GENERAL SPECIFICATIONS

Frequency Range: DC to 3 GHz

Input Power*: 150 Watts

Operating Temp Range: -55 to +150°C

Attenuation Stability:** 0.0001 dB/dB/°C, Max.

Mounting Flange: Copper, Pd over Ni;
other platings available

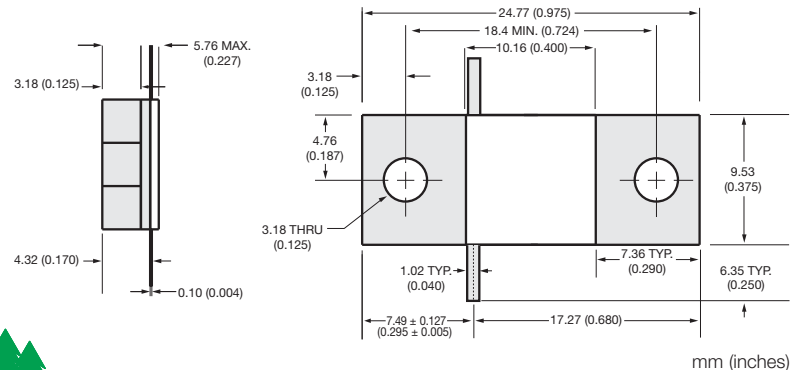
Resistive Elements: Tantalum Nitride

Substrate Material: Aluminum Nitride

Tabs: 99.99% Pure Silver, 0.25 (0.004) thick

Cover: Alumina

RoHS Compliant



Mechanical Tolerance: ±0.25 (0.010) unless otherwise specified

AVX Part Number	Nominal Attenuation (dB)	Frequency Sensitivity (dB, max.)	Maximum Deviation from Nominal (dB)	VSWR (max.)
RP10975A01DBFPBK	1	± 0.25	+0.45 / -0.15	1.55:1
RP10975A02DBFPBK	2	±0.30	+0.50 / -0.30	1.50:1
RP10975A03DBFPBK	3	± 0.30	+0.60 / -0.30	1.50:1
RP10975A06DBFPBK	6	± 0.45	+0.80 / -0.20	1.40:1
RP10975A09DBFPBK	9	± 0.35	+0.70 / -0.20	1.30:1
RP10975A10DBFPBK	10	± 0.20	+0.40 / -0.30	1.40:1
RP10975A17DBFPBK	17	± 1.00	+1.00 / -1.20	1.30:1
RP10975A20DBFPBK	20	± 1.00	+1.00 / -1.20	1.30:1
RP10975A30DBFPBK	30	± 1.05	+1.75 / -1.20	1.25:1

For Attenuator Power Handling vs. Mounting Surface Temperature, see page 2.

LEADED CHIP ATTENUATORS – RP2 SERIES

GENERAL SPECIFICATIONS

Frequency Range: DC to 3 GHz

Input Power*: 150 Watts

Operating Temp Range: -55°C to +150°C

Attenuation Stability:** 0.0001 dB/dB/°C, Max.

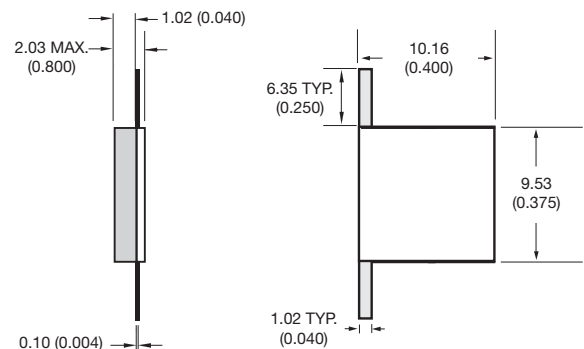
Resistive Elements: Tantalum Nitride

Substrate Material: Aluminum Nitride

Tabs: 99.99% Pure Silver, 0.10 (0.004) thick

Cover: Alumina

RoHS Compliant



Mechanical Tolerance: ±0.25 (0.010) unless otherwise specified

AVX Part Number	Nominal Attenuation (dB)	Frequency Sensitivity (dB, max.)	Maximum Deviation from Nominal (dB)	VSWR (max.)
RP23740A01DBFPBK	1	± 0.20	+0.45 / -0.15	1.55
RP23740A03DBFPBK	3	± 0.30	+0.60 / -0.30	1.50
RP23740A06DBFPBK	6	± 0.30	+0.60 / -0.20	1.30
RP23740A09DBFPBK	9	± 0.30	+0.60 / -0.20	1.30
RP23740A10DBFPBK	10	± 0.20	+0.40 / -0.30	1.25
RP23740A20DBFPBK	20	± 1.00	+1.00 / -1.20	1.25
RP23740A30DBFPBK	30	± 1.05	+1.75 / -1.20	1.25

For Attenuator Power Handling vs. Mounting Surface Temperature, see page 2.