

High Power Fixed Attenuators (Heat sink Mounting Type)

AT-1200 and AT-1300 Series



AT-1210-H·J



AT-1320-H·J

■Features

1.Small Size and Economical

Beryllia is used for the material of the resistance element to enable the attenuation to be of small size and low cost.

2.High Power Capacity

Mounting these attenuators to a heat sink permits the AT-1200 Series to be used at up to 30 W and the AT-1300 Series to be used at up to 50 W.

3.High Reliability

These attenuators show stable characteristics for environments of varying temperature, humidity, and gases.

■Product Specifications

Ratings	Frequency range (Note) Characteristic impedance Maximum Input Power (Note)	DC to 2.0 GHz 50 ohms 30 to 50 W	Operating temperature range Operating relative humidity	-10°C to +65°C 95% Max.
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Note: The frequency range and the maximum input power will differ depending on the products.

Item	Standard	Conditions
1.Vibration	No electrical discontinuity of 1 μ s or more No damage, cracks, or parts dislocation	Frequency of 10 to 2000 Hz, overall amplitude of 1.52 mm, acceleration of 98 m/s ² for 2 hours in each of 3 directions
2.Shock		Acceleration of 490 m/s ² , sine half-wave waveform, 3 cycles in each of the 3 axis
3.Temperature cycle	No damage, cracks, or parts dislocation	Temperature: -55°C → +5°C to +35°C → +85°C → +5°C to +35°C Time: 30 → 15 max. → 30 → 15 max. (Minutes) 200 cycles

●The test method conforms to MIL-STD-202.

■Materials

Part	Material	Finish
Connector Body	Stainless steel	Passivated
Body	Aluminum	Conductive white alumite
Female contacts	Beryllium copper	Gold plating
Insulation	PTFE	—
Attenuation element	Metal film	—

■Ordering Information

AT - **12** **10** - **H·J**
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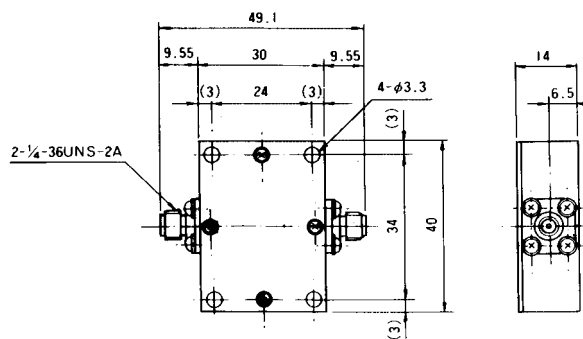
① AT: Indicates a fixed attenuator	③ Attenuation 10 : 10dB 20 : 20dB
② Indicates the Series Name (Maximum Usable Power) 12: HRM type plug - jack 30W 13: N type plug - jack 50W	④ Coupling Portion H·J : SMA type jack - jack N·H : N type jack - SMA type jack

■Specifications

Part Number	Frequency Range (GHz)	Attenuation (dB)	V.S.W.R. (Max)	Impedance (ohms)	Power (W)	Heat Sink Temperature at Maximum Load (°CMax)	Connectors	Weight (g)
AT-1210-H · J	DC~1	10±0.5	1.2	50	30W(CW)	+65	HRM-J · J	54
AT-1220-H · J	DC~1	20±0.5	1.2	50	30W(CW)	+65	HRM-J · J	54
AT-1310-H · J	DC~2	10±0.5	1.2	50	50W(CW)	+65	HRM-J · J	54 ※
AT-1320-H · J	DC~2	20±0.5	1.2	50	50W(CW)	+65	HRM-J · J	54 ※

※The AT-1300 Series has input and output directivity.

■External Dimensions



AT-1200-H · J
AT-1300-H · J

■Typical Data

