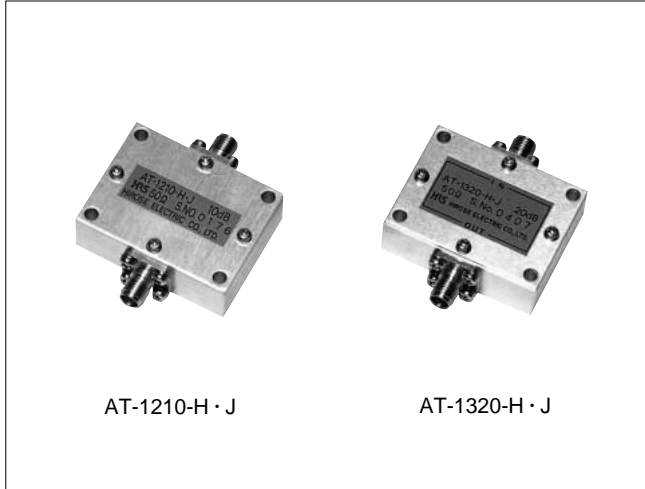


# High Power Fixed Attenuators (Heat sink Mounting Type)

## 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 $\mu$ 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 <sup>2</sup> for 2 hours in each of 3 directions
2.Shock		Acceleration of 490 m/s <sup>2</sup> , 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**

①      ②      ③      ④

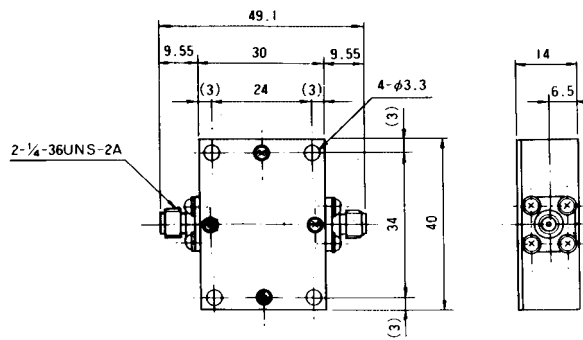
① AT: Indicates a fixed attenuator	③ Attenuation 10 : 10dB 20 : 20dB
② Indicates the Series Name (Maximum Usable Power) 12: HRM type plug - jack 30W 13: N type plug - jack 50W	④ Coupling Portion H·J : SMA type jack - jack N·H : N type jack - SMA type jack

## ■ 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

