High Power Fixed Attenuators (Heat sink Mounting Type)

AT-1200 and AT-1300 Series



■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℃ to +65℃ 95% Max. |
|---------|--|--|--|--------------------------|
|---------|--|--|--|--------------------------|

Note: The frequency range and the maximum input power will differ depending on the products.

| Item | Standard | Conditions | | |
|---------------------|--|--|--|--|
| 1.Vibration | | Frequency of 10 to 2000 Hz, overall amplitude of 1.52 m | | |
| 1.Vibration | No electrical discontinuity of 1 μ s or more | acceleration of 98 m/s² for 2 hours in each of 3 directions | | |
| 2.Shock | No damage, cracks, or parts dislocation | Acceleration of 490 m/s², sine half-wave waveform, | | |
| | | 3 cycles in each of the 3 axis | | |
| 3.Temperature cycle | No damage, cracks, or parts dislocation | Temperature: $-55^{\circ}\text{C} \rightarrow +5^{\circ}\text{C}$ to $+35^{\circ}\text{C} \rightarrow +85^{\circ}\text{C} \rightarrow +5^{\circ}\text{C}$ to $+35^{\circ}\text{C}$ | | |
| | | Time: 30 → 15 max. → 30 → 15 max. (Minutes) | | |
| | - FE 3 0750.00 | 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 | TINE CON | | |

■Ordering Information



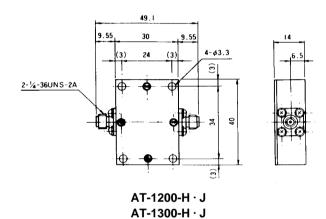
AT: Indicates a fixed attenuator
Attenuation
10 : 10dB
20 : 20dB
(Maximum Usable Power)
12: HRM type plug - jack 30W
13: N type plug - jack 50W
Attenuation
20 : 20dB
4 Coupling Portion
H · J : SMA type jack - jack
N · H : N type jack - SMA type jack

■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



■Typical Data

