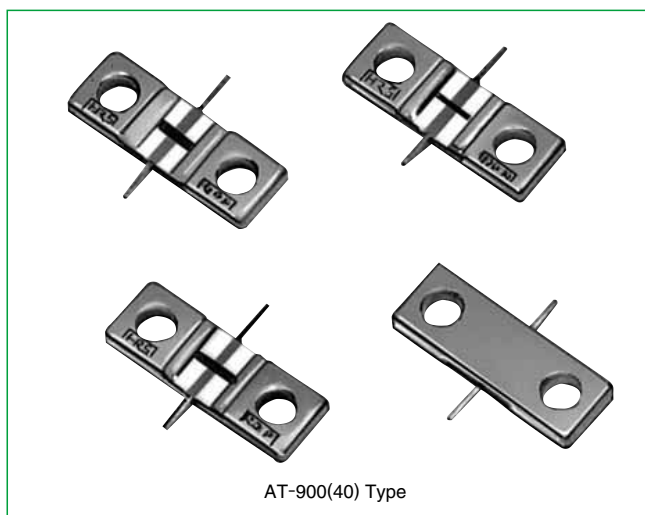


# Stripline Mounting Fixed Attenuators (DC to 8 GHz)

## AT-900 Series



### ■Features

#### 1.Frequency Range from DC to 8 GHz

Although these attenuators are of the surface mount type, they offer superior high frequency characteristics from DC to 8 GHz.

#### 2.Abundant Variations of Attenuators

Attenuation amounts are available in 11 types from 0 to 10 dB in 1 dB steps.

### ■Product Specifications

| Ratings | Frequency Range (Note)<br>Characteristic impedance<br>Maximum Input Power (Note) | DC to 8.0 GHz<br>50 ohms<br>1 W | Operating temperature range<br>Operating relative humidity | -10℃ to +65℃<br>95% Max. |
|---------|----------------------------------------------------------------------------------|---------------------------------|------------------------------------------------------------|--------------------------|
|---------|----------------------------------------------------------------------------------|---------------------------------|------------------------------------------------------------|--------------------------|

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 | 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             | No damage, cracks, or parts dislocation          | 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℃ → +15℃ to +35℃ → +85℃ → +15℃ to +35℃<br>Time: 30 → 15 max. → 30 → 15 max. (Minutes)<br>5 cycles                 |

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

### ■Materials

| Part                | Material   | Finish         |
|---------------------|------------|----------------|
| Connector Body      | Brass      | Nickel plating |
| Attenuation element | Metal film | —              |
| Tabs                | Copper     | Solder plating |

### ■Ordering Information

**AT - 9 01 (40)**  
①
②
③
④

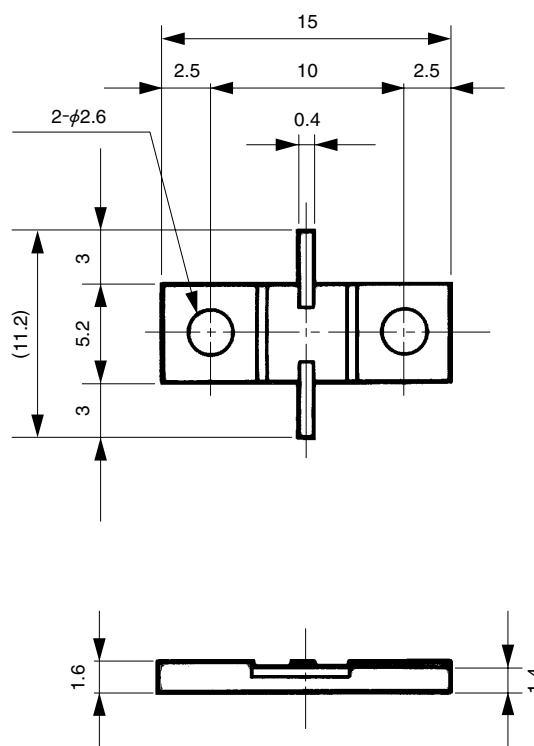
|                                            |                                                                                     |
|--------------------------------------------|-------------------------------------------------------------------------------------|
| ① AT: Indicates a fixed attenuator         | ③ Attenuation<br>01 : 1dB<br>06 : 6dB<br>00-(0) : 0dB (Through)<br>00-(1.5) : 1.5dB |
| ② Indicates the Series Name: AT-900 Series | ④ (40): RoHS Compliant                                                              |

## AT-900 Series Stripline Mounting Fixed Attenuators (DC to 8 GHz)

### Specifications

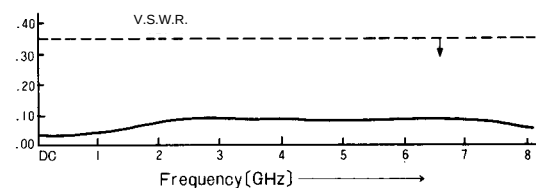
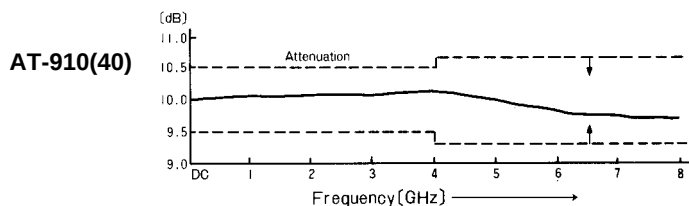
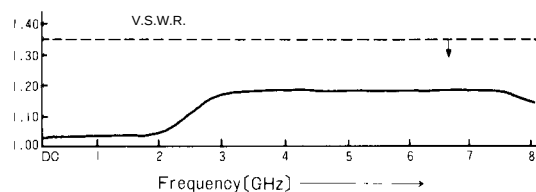
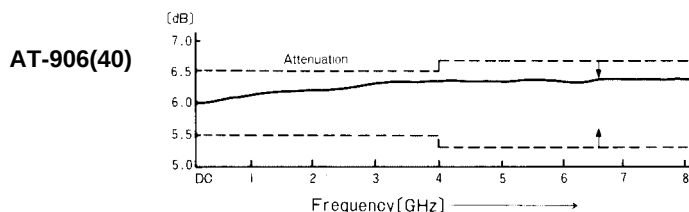
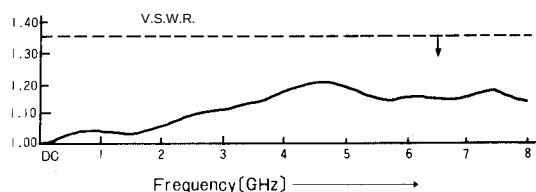
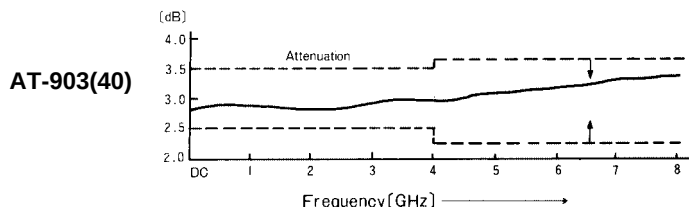
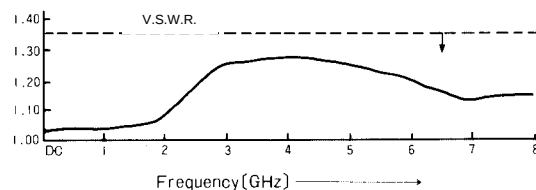
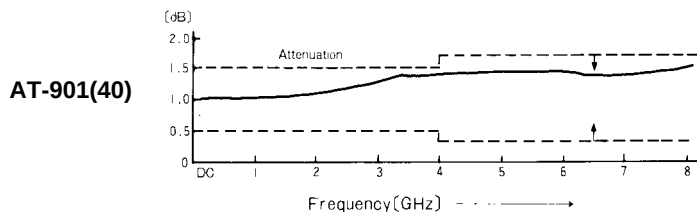
| Model No.      | Attenuation (dB)               |                                | V.S.W.R. (Max)<br>DC~8GHz | Power (W) | Surface Temperature at Maximum Load (°C Max) | Weight (g) | RoHS |
|----------------|--------------------------------|--------------------------------|---------------------------|-----------|----------------------------------------------|------------|------|
|                | DC~4GHz                        | 4~8GHz                         |                           |           |                                              |            |      |
| AT-900-(0)(40) | 0 <sup>+0.5</sup> <sub>0</sub> | 0 <sup>+0.7</sup> <sub>0</sub> | 1.35                      | 1         | +85                                          | 1          | YES  |
| AT-901(40)     | 1±0.5                          | 1±0.7                          | 1.35                      | 1         | +85                                          | 1          |      |
| AT-902(40)     | 2±0.5                          | 2±0.7                          | 1.35                      | 1         | +85                                          | 1          |      |
| AT-903(40)     | 3±0.5                          | 3±0.7                          | 1.35                      | 1         | +85                                          | 1          |      |
| AT-904(40)     | 4±0.5                          | 4±0.7                          | 1.35                      | 1         | +85                                          | 1          |      |
| AT-905(40)     | 5±0.5                          | 5±0.7                          | 1.35                      | 1         | +85                                          | 1          |      |
| AT-906(40)     | 6±0.5                          | 6±0.7                          | 1.35                      | 1         | +85                                          | 1          |      |
| AT-907(40)     | 7±0.5                          | 7±0.7                          | 1.35                      | 1         | +85                                          | 1          |      |
| AT-908(40)     | 8±0.5                          | 8±0.7                          | 1.35                      | 1         | +85                                          | 1          |      |
| AT-909(40)     | 9±0.5                          | 9±0.7                          | 1.35                      | 1         | +85                                          | 1          |      |
| AT-910(40)     | 10±0.5                         | 10±0.7                         | 1.35                      | 1         | +85                                          | 1          |      |

### External Dimensions



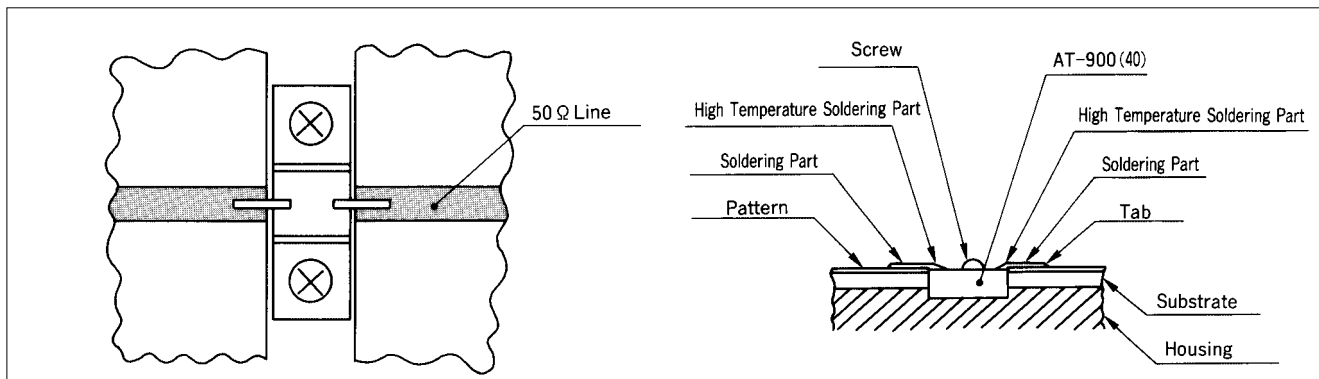
AT-900 Type

## Typical Data



## Mounting Method

### AT-900(40) Type



- Make the AT-900(40) tab height from the housing and the thickness of the microstrip board the same amount.
- The tabs are attached with high temperature solder (having a melting point of 280°C). The soldering temperature to the microstrip board must be less than this.