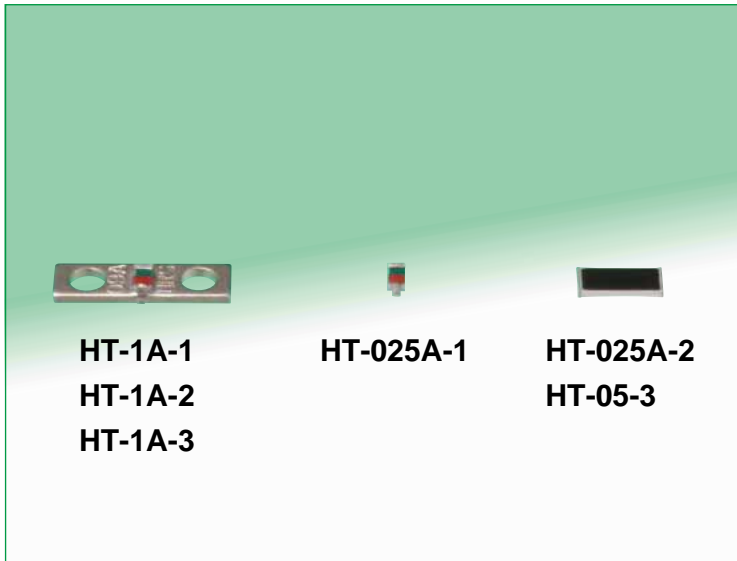


# Stripline Mounting Non-reflective Terminators

## HT Series



### ■ Features

#### 1. High Performance

Wide bandwidth and high degree of matching through the use of our high frequency matching technology.

#### 2. High-density Mounting

The housing functions as a radiator to dissipate heat generated from the resistor. This permits small size and high-density mounting.

#### 3. Can be used to substitute for HT-025-1, HT-025-2, HT-1-1, HT-1-2, HT-1-3, and HT-05-2

Mounting pattern for this series is the same as on existing HT Series.

### ■ Product Specifications

Ratings	Frequency range Characteristic impedance Maximum input power	DC to 8GHz 50Ω 0.25 to 1W	Operating temperature Operating humidity	-10℃ to +65℃ 95% max.
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Note: The frequency range and the maximum input power will differ, depending on the termination used.

Item	Characteristic requirement	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 1.5mm, acceleration of 98m/s <sup>2</sup> , 2 hours in each of the 3 directions.
2. Shock		Acceleration of 490m/s <sup>2</sup> , sine half-wave waveform, 3 cycles in each of the 3 axis.
3. Temperature cycle		Temperature: -55℃ → +15℃ to +35℃ → +85℃ → +15℃ to +35℃ Duration: 30 → 2 to 3 → 30 → 2 to 3 (Minutes) 5 cycles

The test method conforms to MIL-STD-202.

### ■ Materials / Finishes

#### HT-025A-1, HT-025A-2

Component	Material	Finish
Tab	Copper	Tin-lead plated
Resistor	Metal film	———

#### HT-1A-1, HT-1A-2, HT-1A-3

Component	Material	Finish
Body	Aluminum	Nickel plated
Tab	Copper	Tin-lead plated
Resistor	Metal film	———

#### HT-05-3

Component	Material	Finish
Electrode	———	Tin plated
Resistor	Metal film	———

### ■ Ordering information

**HT - 025 A - 1 (06)**

①      ②      ③      ④      ⑤

① Series name: HT Series
② Input power 025: 0.25 W 05 : 0.5 W 1 : 1 W
③ Indicates substitute product
④ Suffix

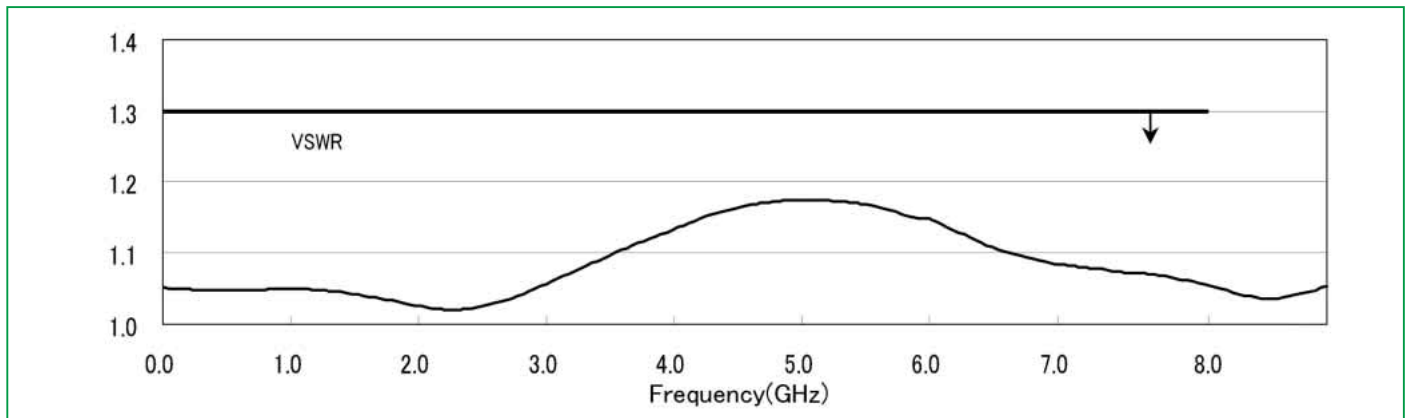
## Specifications

Part number	Frequency range (GHz)	V.S.W.R (Max)	Characteristic Impedance ( $\Omega$ )	Power (W)	Mounting surface temperature( $^{\circ}\text{CMax.}$ ) at time of maximum input power	Heat resistance ( $^{\circ}\text{C}$ )	Weight (g)
HT-025A-1	DC-8	1.30	50	0.25	+65	50	0.1
HT-025A-2	DC-8	1.30	50	0.25	+65	50	0.1
HT-1A-1	DC-8	1.30	50	1	+65	50	0.3
HT-1A-2							
HT-1A-3							
HT-05-3 (Note)	DC-1	1.20	50	0.5	+65	150	0.1

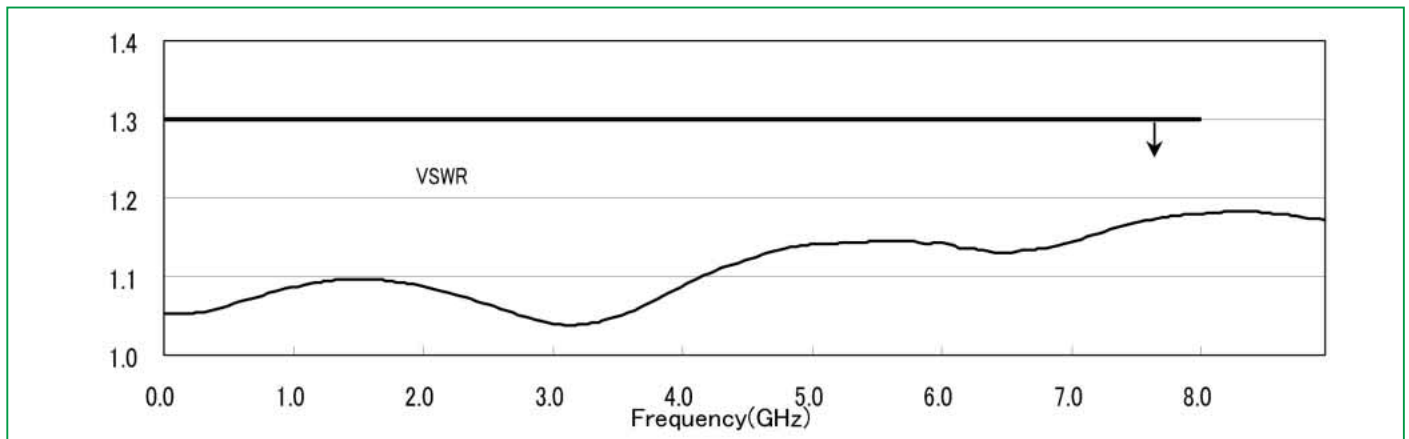
Note: Tape and reel packaging is available for HT-05-3. When ordering, add (06) after the end of the part number. One reel: 1,000 pieces

## Typical performance data

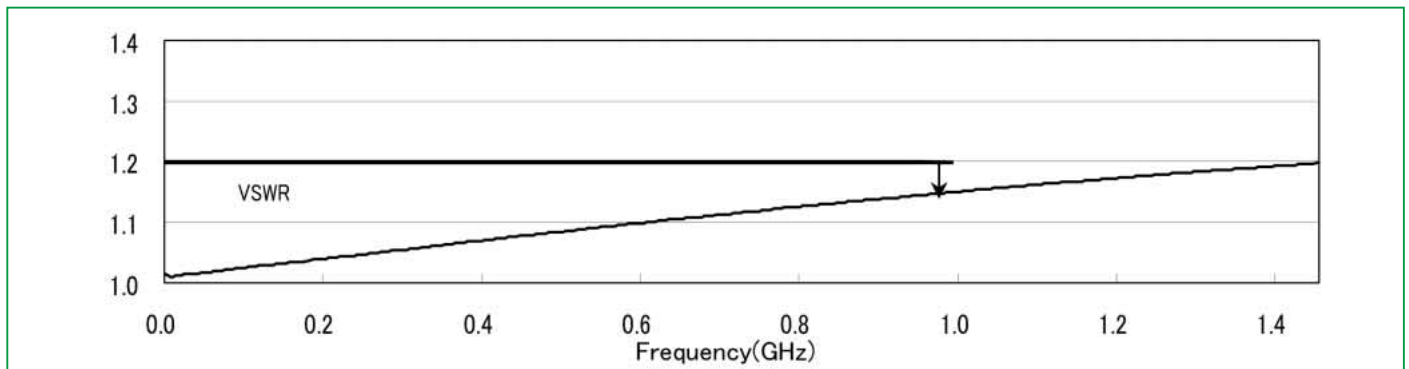
### HT-025A-1



### HT-1A-1

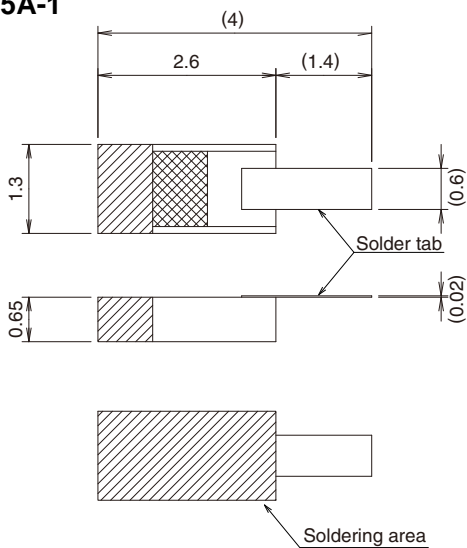


### HT-05-3

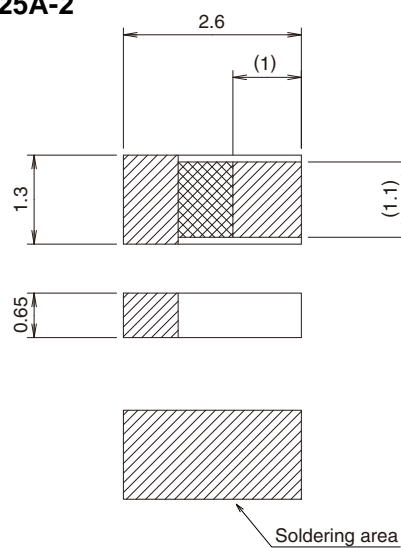


## ■ Dimensions

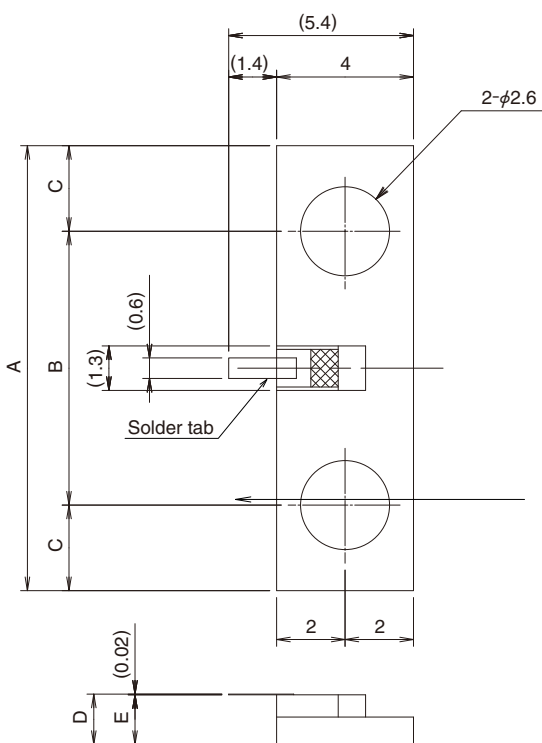
HT-025A-1



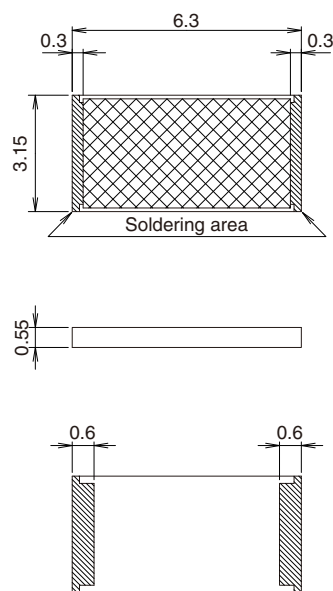
HT-025A-2



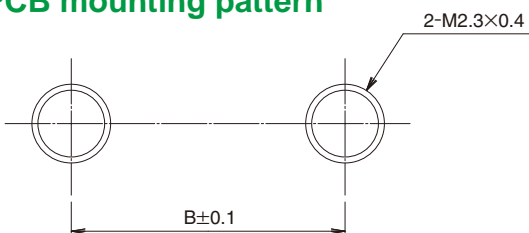
HT-1A-1, HT-1A-2, HT-1A-3



HT-05-3



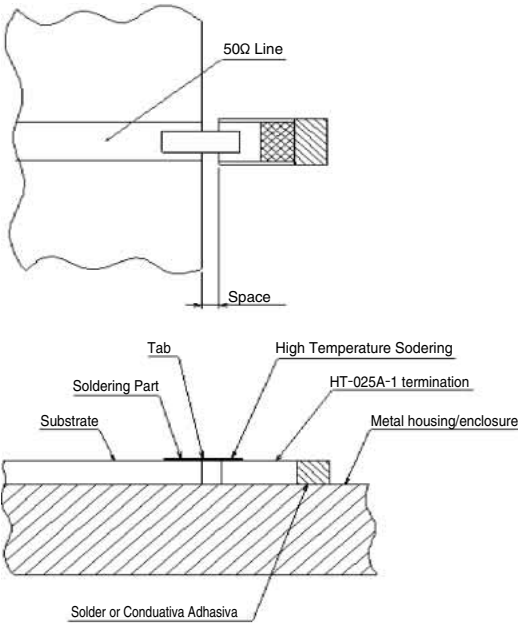
## ◆ PCB mounting pattern



Part number	A	B	C	D
HT-1A-1	13	8	1.47	1.45
HT-1A-2	13	8	1.17	1.15
HT-1A-3	16	12	1.47	1.45

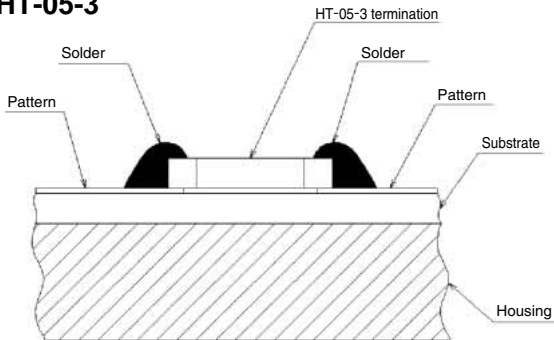
## ■ Mounting Instructions and Precautions

### HT-025A-1



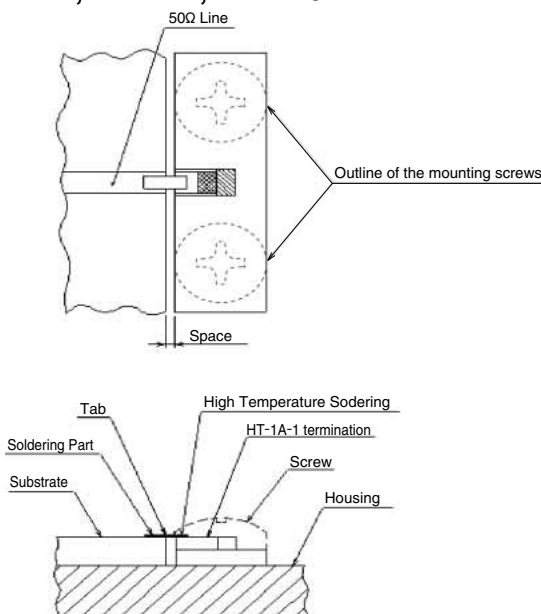
- \*Do not leave a space between the termination and the microstrip board.
- \*Keep the same thickness of the microstrip board as the tab height of the termination.
- \*The soldering tab is attached to the termination with high-temperature solder (having melting point of 280°C). Soldering of the tab to the microstrip board must be performed at a temperature lower than 280°C. When soldering the tab to the 50 ohm line on the substrate, it is recommended to leave a slight slack in order to improve thermal reliability of the solder joint.

### HT-05-3



- \*Solder the termination directly on the pattern of the microstrip line.
- \*Using a soldering iron adjusted to the temperature of 260°C, attach the termination within 5 seconds.
- \*Once soldered in place, do not remove or reuse.

### HT-1A-1, HT-1A-2, HT-1A-3



- \*Do not leave a space between the HT-1A-1, HT-1A-2, and HT-1A-3 and the microstrip board.
- \*Keep the same dimension for the thickness of the microstrip board and the tab height of the HT-1A-1, HT-1A-2, and HT-1A-3 from the housing.
- \*The tabs of the HT-1A-1, HT-1A-2, and HT-1A-3 are attached with high-temperature solder (having a melting point of 280°C). Soldering to the microstrip board must be performed at a temperature lower than this. (See Note)

Note: Although the high frequency characteristics will be somewhat degraded, please attach the tab with some slack in order to improve the thermal reliability.



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