## **Stripline Non-reflective Terminations (Externally Mounted)**

#### **HRM-TM Series**



#### ■Features

### 1. High Performance

These wide bandwidth/high matching non-reflective termination use Hirose Electric original high frequency matching technology.

### 2. Stripline External Mounting Type

These termination are constructed to mount externally to the housing of a microwave device.

# 3.High Degree of Matching Type and Economical Type

To suit the application, a type that features a high degree of matching (with VSWR of 1.15 max from DC to 18 GHz) and an economical type (with VSWR of 1.15 max from DC to 8 GHz, and VSWR of 1.25 or less from 8 to 12.4 GHz) are available.

#### 4.Applications

Ideal used as a dummy load for coaxial type circulators, directional couplers, hybrid dividers, and other devices.

## **■**Product Specifications

Ratings	Rated frequency range (Note) Characteristic impedance Maximum Input Power (Note)	DC to 18.0 GHz 50 ohms 1 to 20 W	Operating temperature range Operating relative humidity	
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Note: The frequency range and the maximum usable power will differ depending on the model.

Item	Standard	Conditions			
1.Vibration	No electrical discontinuity of 1 $\mu$ s or more	Frequency of 10 to 500 Hz, overall amplitude of 1.52 mm 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: $-55^{\circ}C \rightarrow +5^{\circ}C$ to $+35^{\circ}C \rightarrow +85^{\circ}C \rightarrow +5^{\circ}C$ to $+35^{\circ}C$ Time: $30 \rightarrow 15$ max. $\rightarrow 30 \rightarrow 15$ max. (Minutes) 200 cycles			

<sup>■</sup>The test method conforms to MIL-STD-202.

### **■**Materials

Part	Material	Finish		
Body (Note)	Brass	Nickel plating		
Insulator	PTFE			
Contacts	Brass	Gold plating		
Resistor	Metal film			

Note: HRM-TM-025 has stainless steel body and has received gold

## **■**Ordering Information

1 Series Name: HRM Series	3 Power		
	(Examples) 1: 1 W		
2 Indicates a non-reflective termination	(Exception) 025: 1 W		
	4 Suffix		

## **■**Specifications

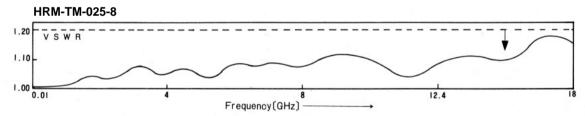
Part Numbe	Frequnency Range (Ghz)	V.S.W.R. (MAX)	Power (W)	Direct Current Resistance (Ohms)	Temperature (°C Max)	Operating Temperature Rang (℃)	Heat Sink Temperature at Maximum Load (°CMax)		Weight (g)
HRM-TM-025	DC~10	1.20	1	50±1.5	40	—30~+65	+65	294	2.5
HRM-TM-025-6	DC~18	1.20	1	50±1.0	40	—30~+65	+65	392	3
HRM-TM-025-8	DC~18	1.20	1	50±1.0	40	—30~+65	+65	392	3.5
HRM-TM-025-9	DC~12	1.20	1	50±1.5	40	—30~+65	+65	392	3.5
HRM-TM-025-10	DC~4 4~8	1.08 1.12	1	50±1.0	40	—30~+65	+65	392	3
HRM-TM-025-11	DC~18	1.20	1	50±1.0	40	—30~+65	+65	392	3
HRM-TM-025-17	DC~8 8~12.4	1.15 1.25	1	50±1.5	40	—30~+65	+65	392	3
HRM-TM-10-2	DC~12.4 12.4~18	1.20 1.25	10	50±1.5	56	—10~+65	+65	392	3
HRM-TM-10-4	DC~12.4 12.4~18	1.20 1.25	10	50±1.5	56	—10~+65	+65	392	3
HRM-TM-20-1	DC~8.5 8.5~10	1.20 1.25	20	50±1.5	56	—10~+65	+65	*2	3

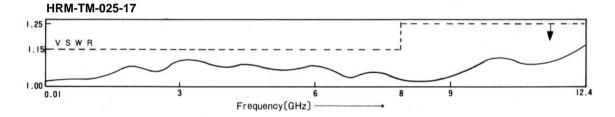
<sup>%1 9.80665</sup>N · m=1kgf · m

\*2 No special standards have been established because of the spring contacts.

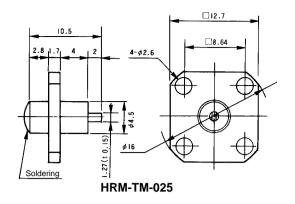
0.980665μN · (m=1kgf · cm (Example)392μN · m<del>=</del>400kgf · cm

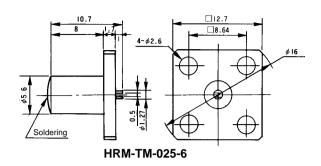
## **■**Typical Data

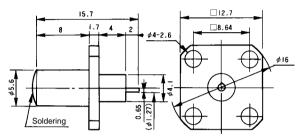




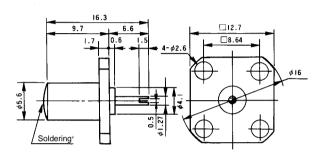
## **■**External Dimensions



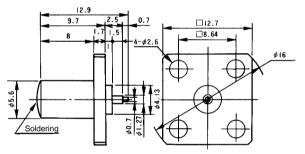




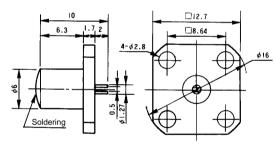
HRM-TM-025-8



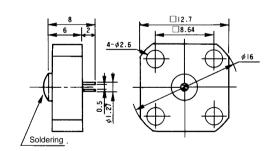
HRM-TM-025-10



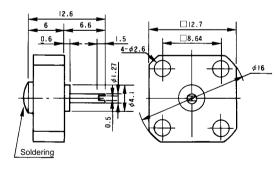
HRM-TM-025-11



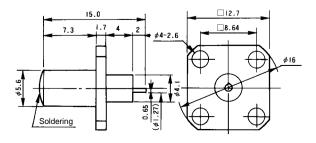
HRM-TM-025-17



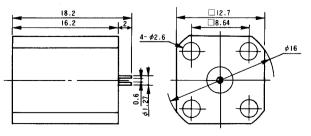
HRM-TM-10-2



HRM-TM-10-4



HRM-TM-025-9



HRM-TM-20-1