

Stripline Non-reflective Terminators (Externally Mounted)

HRM-TM Series



■ Features

1. High Performance

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

2. Stripline External Mounting Type

These terminators 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

Rating	Rated frequency range (NOTE) Characteristic impedance Maximum usable power (NOTE)	DC to 18.0 GHz 50Ω 1 to 20 W	Operating temperature range Operating relative humidity	-30°C to +65°C 95% or less
--------	---	------------------------------------	--	-------------------------------

NOTE: The frequency range and the maximum usable power will differ depending on the model.

Item	Standard	Conditions
1. Vibration resistance	No electrical disconnections of 1μs or greater No damage, cracks, or parts looseness	Frequency of 10 to 2000 Hz, overall amplitude of 1.52 mm, 98 m/s ² acceleration, in 3 axial directions, 2 hours each
2. Shock resistance	No electrical disconnections of 1μs or greater No damage, cracks, or parts looseness	490 m/s ² acceleration, half sine wave, in 3 axial directions, 3 times each
3. Temperature cycle	No damage, cracks, or parts looseness	(-55°C: 30 min. → 5 to 35°C: Within 15 min. → 85°C: 30 min → 5 to 35°C: Within 15 min.) for 200 cycles

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

■ Materials

Part	Material	Processing
External cladding (NOTE)	Brass	Nickel plating
Insulation	Teflon	—
Contacts	Brass	Gold plating
Radiator	Aluminum	Black alumite
Resistor	Metal film	—

NOTE: HRM-TM-025 has stainless steel external cladding and has received gold plating.

■ Product Number Breakdown

HRM - TM - 025 - 8

① ② ③ ④

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

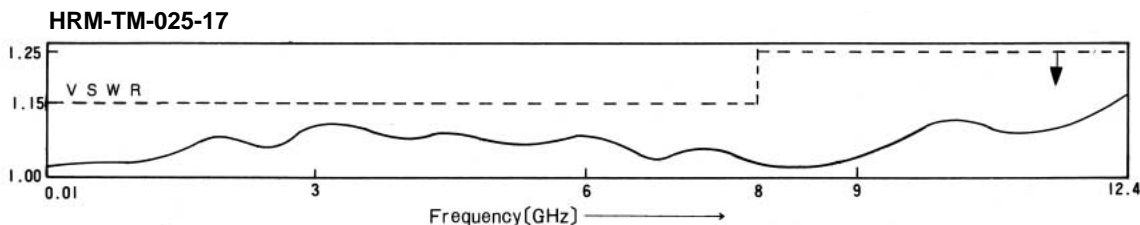
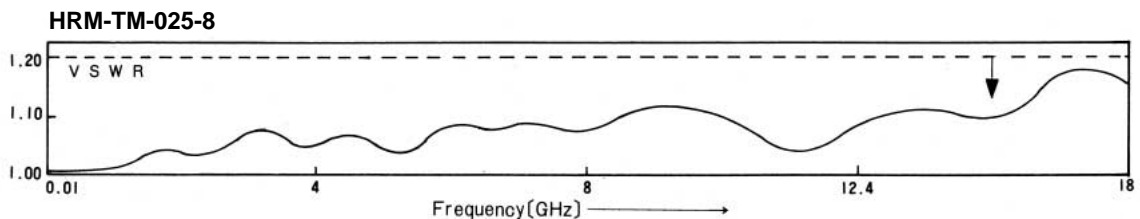
■ Specifications

Model No.	(Ghz) Frequency Range	V.S.W.R. (MAX)	(W) Power	(Ω) Direct Current Resistance	(°C Max) Temperature	(°C) Operating Temperature Rang	(°CMax) Heat Sink Temperature at Maximum Load	(μN · m) Operating Temperature Rang	(g) Weight
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

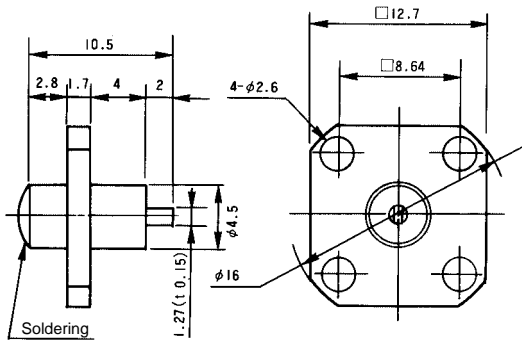
※1 9.80665N · m=1kgf · m
 0.980665μN · (m=1kgf · cm
 (Example)392μN · m=400kgf · cm

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

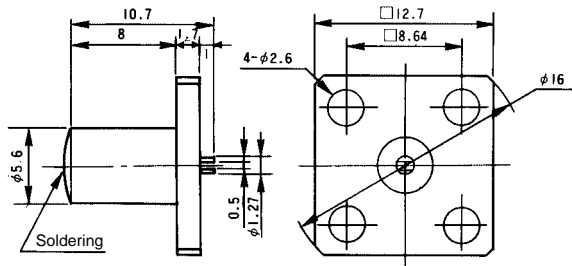
■ V.S.W.R. Data



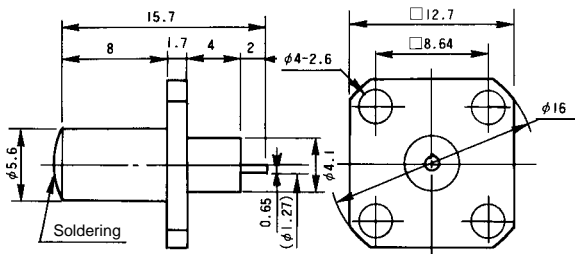
External Dimensions



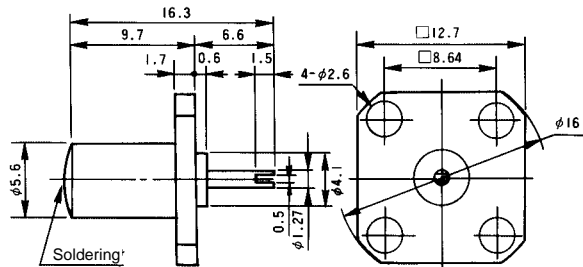
HRM-TM-025



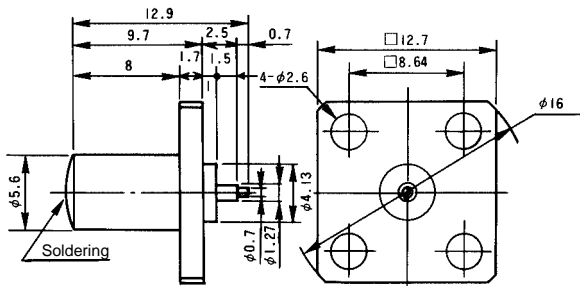
HRM-TM-025-6



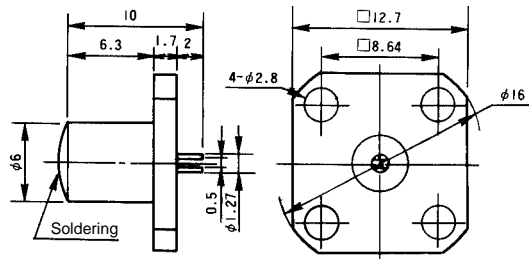
HRM-TM-025-8



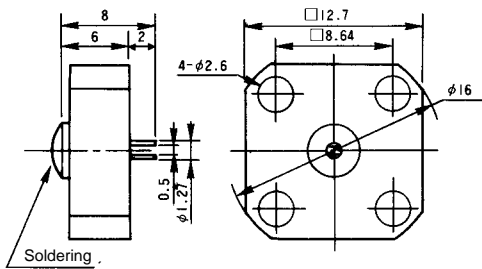
HRM-TM-025-10



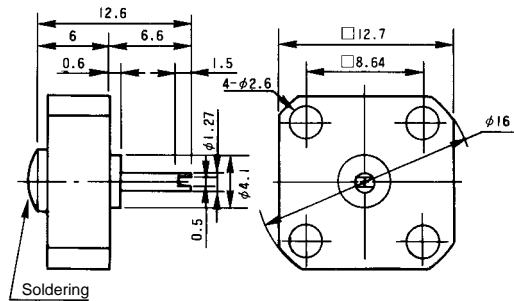
HRM-TM-025-11



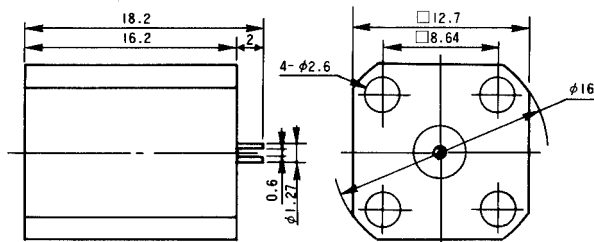
HRM-TM-025-17



HRM-TM-10-2



HRM-TM-10-4



HRM-TM-20-1