# Non-reflective Terminations (SMA Type)

## HRM-TM Series




## ■Features

### 1.High Performance

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

### 2.Equipped with SMA Connectors

Use of SMA connectors (Hirose Electric HRM Series) which feature stainless steel for the exterior cladding make these couplers durable.

## ■Product Specifications

| | | | | |
|---|---|---|---|---|
| Ratings | Frequency range (Note)<br>Characteristic impedance<br>Maximum Input Power (Note) | DC to 26.5 GHz<br>50 ohms<br>0.25 to 10 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 μs or more<br>No damage, cracks, or parts dislocation | Frequency of 10 to 2000 Hz, overall amplitude of 1.52 mm, acceleration of 98 m/s² for 2 hours in each of 3 directions |
| 2.Shock | | 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℃ → +5℃ to +35℃ → +85℃ → +5℃ to +35℃<br>Time: 30 → 15 max. → 30 → 15 max. (Minutes)<br>200 cycles |

●The test method conforms to MIL-STD-202.
●Please see the specification items for details concerning the VSWR.

## ■Materials

| Part | Material | Finish |
|---|---|---|
| Connector Body (Note) | Stainless steel | Nickel plating |
| Insulation | PTFE | —— |
| Male contacts | Brass | Gold plating |
| Female contacts | Beryllium copper | Gold plating |
| Outer conductor | Brass | Nickel plating |
| Coupling (Note) | Stainless steel | Passivated |
| Radiator | Aluminum | Black alumite |
| Resistor | Metal film | —— |

Note: The external cladding and coupling of HRM-601, HRM-602, and HRM-603 have received gold plating processing.

## ■Ordering Information

**HRM - 601 S**
❶ ❷ ❸

| |
|---|
| ❶ Series Name: HRM Series |
| ❷ 600 to 699: Indicates a non-reflective termination. |
| ❸ Coupling Finish<br>Blank: Gold plating<br>S: Passivated<br>A: Passivated (HRM-601S type without cap)<br>D: Passivated (With connection leads) |

**HRM - TM P - 5 - 2**
❶ ❷ ❸ ❹ ❺

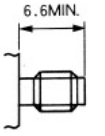
| | |
|---|---|
| ❶ Series Name: HRM Series | ❹ Power<br>(Example) 05: 0.5 W<br>2: 2 W |
| ❷ TM: Indicates a non-reflective terminator. | |
| ❸ Connector type<br>P: Plug type<br>J: Jack type | ❺ Suffix |

## ■Specifications

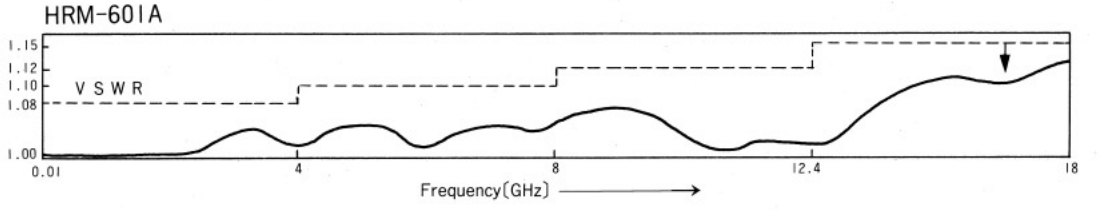
| | Part Number | Frequency Range (GHz) | V.S.W.R.(Max) | | | | | | Power (W) | Connectors | Weight (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DC～2GHz | 2～4GHz | 4～8GHz | 8～12.4GHz | 12.4～18GHz | 18～26.5GHz | | | |
| | **HRM-601**<br>**HRM-601S** | DC～18 | 1.08 | | 1.10 | 1.12 | 1.15 | —— | 1/4 | HRM-P | 3 |
| | **HRM-601A** | DC～18 | 1.08 | | 1.10 | 1.12 | 1.15 | —— | 1/4 | HRM-P | 3 |
| | **HRM-601A(02)** | DC～26.5 | 1.08 | | 1.10 | 1.12 | 1.15 | 1.20 | 1/4 | HRM-P | 3 |
| | **HRM-601D** | DC～18 | 1.08 | | 1.10 | 1.12 | 1.15 | —— | 1/4 | HRM-P | 3 |
| | **HRM-602**<br>**HRM-602S** | DC～18 | 1.08 | | 1.15 | | 1.35 | —— | 1/4 | HRM-J | 4 |
| | **HRM-603**<br>**HRM-603S** | DC～18 | 1.08 | | 1.10 | 1.12 | 1.15 | —— | 1/4 | HRM-P | 5 |
| | **HRM-TMP-05** | DC～18 | 1.08 | | 1.10 | 1.12 | 1.15 | —— | 1/2 | HRM-P | 3 |
| | **HRM-TMP-2** | DC～18 | 1.10 | 1.15 | 1.20 | 1.25 | 1.25 | —— | 2 | HRM-P | 11 |
| | **HRM-TMP-3** | DC～8 | 1.10 | 1.15 | 1.20 | —— | —— | —— | 3 | HRM-P | 40 |
| ⚠ | **HRM-TMP-5-2** | DC～18 | 1.20 | | | 1.30 | | —— | 5 | HRM-P | 42 |
| | **HRM-TMP-6** | DC～8 | 1.10 | 1.15 | 1.20 | —— | —— | —— | 6 | HRM-P | 56 |
| ⚠ | **HRM-TMP-10-2** | DC～18 | 1.20 | | | 1.30 | | —— | 10 | HRM-P | 82 |

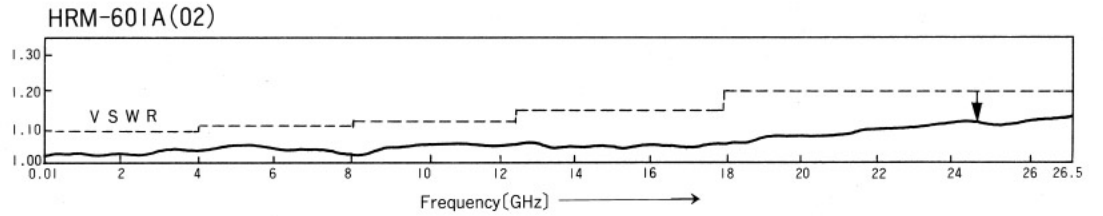
Note 1: When □300 metal plates are attached
Note 2: When connection leads are to be attached to the jack connector side, please use a leading dimension of 6.6 mm or greater from the mounting surface.

⚠CAUTION: Beryllia is used in this product. Please follow associated laws when disposing.

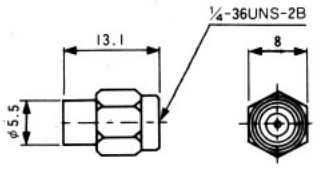



## ■Typical Data

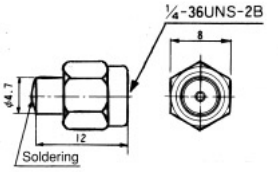


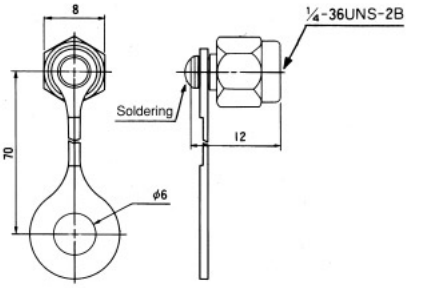
## ■External Dimensions



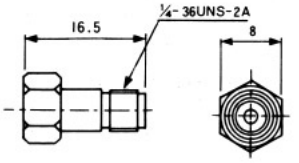

HRM-601
HRM-601S



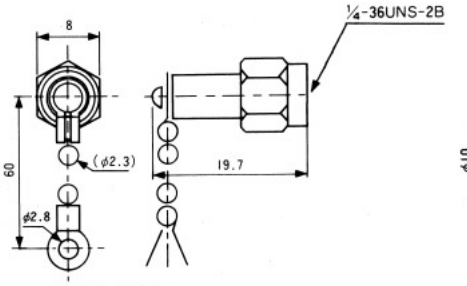

HRM-601A
HRM-601A(02)



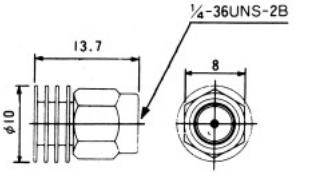

HRM-601D



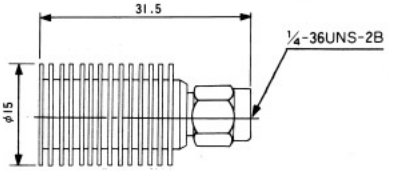

HRM-602
HRM-602S



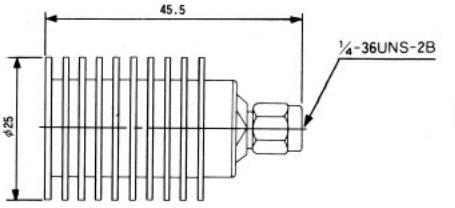

HRM-603
HRM-603S



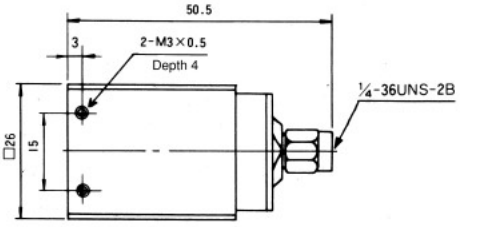

HRM-TMP-05



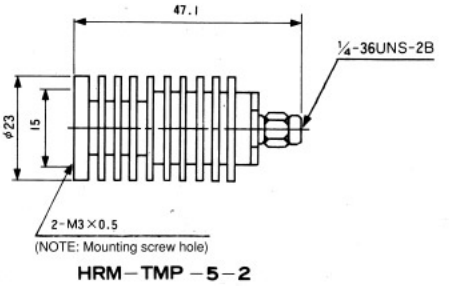

HRM-TMP-2



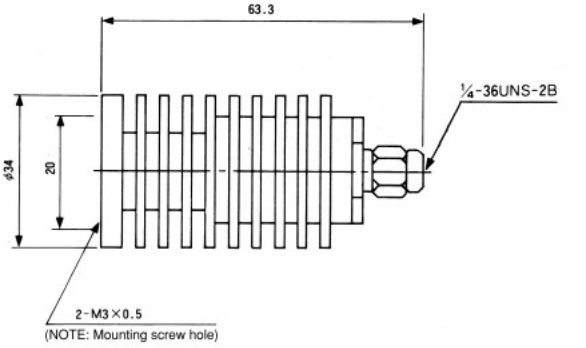

HRM-TMP-3




HRM-TMP-6




HRM-TMP-5-2




HRM-TMP-10-2

(NOTE: Mounting screw hole)

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