

# 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°C to +65°C<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<br>No damage, cracks, or parts dislocation | 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             |                                                                                             | 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°C → +15°C to +35°C → +85°C → +15°C to +35°C<br>Time: 30 → 15 max. → 30 → 15 max. (Minutes)<br>5 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(40), HRM-602(40), and HRM-603(40) have received gold plating processing.

## Ordering Information

**HRM - 601 S (40)**

① ② ③ ④

|                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------|
| ① Series Name: HRM Series                                                                                                                       |
| ② 600 to 699: Indicates a non-reflective termination.                                                                                           |
| ③ Coupling Finish<br>Blank: Gold plating<br>S: Passivated<br>A: Passivated (HRM-601S type without cap)<br>D: Passivated (With connection leads) |
| ④ (4*): RoHS Compliant                                                                                                                          |

**HRM - TM P - 5 - 2 (40)**

① ② ③ ④ ⑤ ⑥

|                                                  |                                          |
|--------------------------------------------------|------------------------------------------|
| ① Series Name: HRM Series                        | ④ Power<br>(Example) 05: 0.5 W<br>2: 2 W |
| ② TM: Indicates a non-reflective terminator.     | ⑤ Suffix                                 |
| ③ Connector type<br>P: Plug type<br>J: Jack type | ⑥ (4*): RoHS Compliant                   |

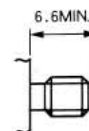
## Specifications

| Part Number                 | Frequency Range (GHz) | V.S.W.R.(Max) |        |        |           |            |             | Power (W) | Connectors | Weight (g) | RoHS |
|-----------------------------|-----------------------|---------------|--------|--------|-----------|------------|-------------|-----------|------------|------------|------|
|                             |                       | DC~2GHz       | 2~4GHz | 4~8GHz | 8~12.4GHz | 12.4~18GHz | 318~26.5GHz |           |            |            |      |
| HRM-601(40)<br>HRM-601S(40) | DC~18                 | 1.08          |        | 1.10   | 1.12      | 1.15       | —           | 1/4       | HRM-P      | 3          | YES  |
| HRM-601A(40)                | DC~18                 | 1.08          |        | 1.10   | 1.12      | 1.15       | —           | 1/4       | HRM-P      | 3          |      |
| HRM-601A(42)                | DC~26.5               | 1.08          |        | 1.10   | 1.12      | 1.15       | 1.20        | 1/4       | HRM-P      | 3          |      |
| HRM-601D(40)                | DC~18                 | 1.08          |        | 1.10   | 1.12      | 1.15       | —           | 1/4       | HRM-P      | 3          |      |
| HRM-602(40)<br>HRM-602S(40) | DC~18                 | 1.08          |        | 1.15   |           | 1.35       | —           | 1/4       | HRM-J      | 4          |      |
| HRM-603(40)<br>HRM-603S(40) | DC~18                 | 1.08          |        | 1.10   | 1.12      | 1.15       | —           | 1/4       | HRM-P      | 5          |      |
| HRM-TMP-05(40)              | DC~18                 | 1.08          |        | 1.10   | 1.12      | 1.15       | —           | 1/2       | HRM-P      | 3          |      |
| HRM-TMP-2(40)               | DC~18                 | 1.10          | 1.15   | 1.20   | 1.25      | 1.25       | —           | 2         | HRM-P      | 11         |      |
| HRM-TMP-3(40)               | DC~8                  | 1.10          | 1.15   | 1.20   | —         | —          | —           | 3         | HRM-P      | 40         |      |
| △ HRM-TMP-5-2(40)           | DC~18                 | 1.20          |        |        | 1.30      |            | —           | 5         | HRM-P      | 42         |      |
| Note 1<br>△ HRM-TMP-6(40)   | DC~8                  | 1.10          | 1.15   | 1.20   | —         | —          | —           | 6         | HRM-P      | 56         |      |
| △ HRM-TMP-10-2(40)          | DC~18                 | 1.20          |        |        | 1.30      |            | —           | 10        | HRM-P      | 82         |      |

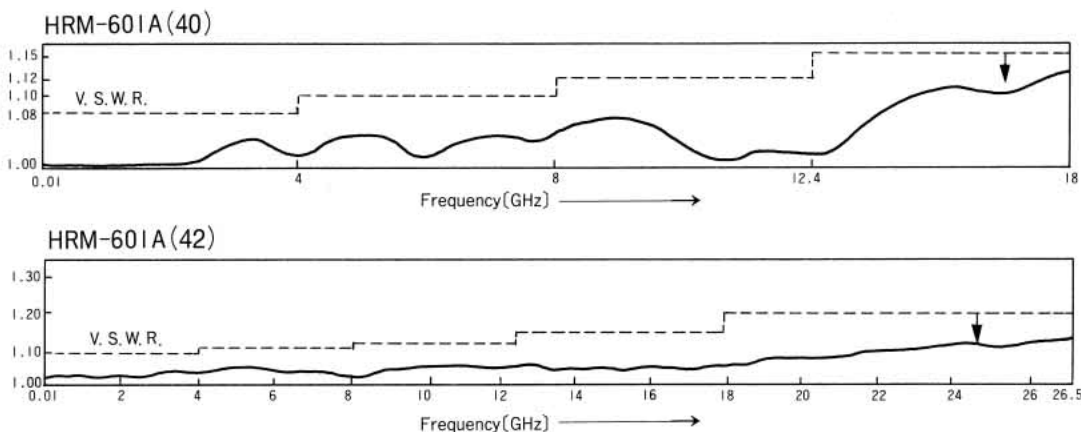
Note 1: When □300 metal plates are attached

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



## HRM-TM Series Non-reflective Terminations (SMA Type)

### External Dimensions

