

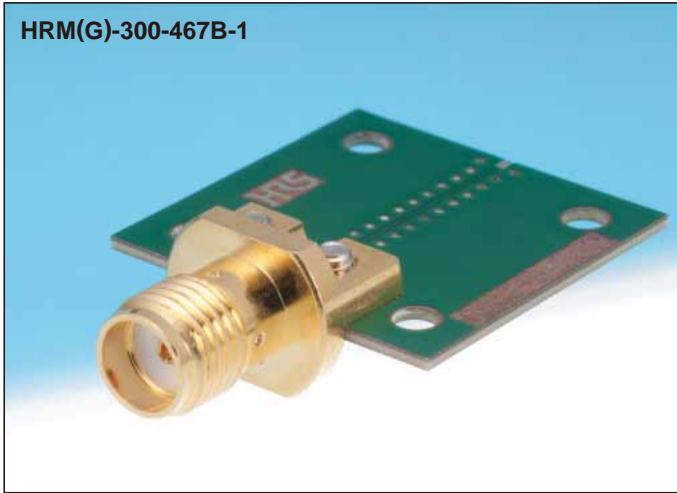
NEW

# SMA Connector for High-Speed Transmission Characteristics Measurement

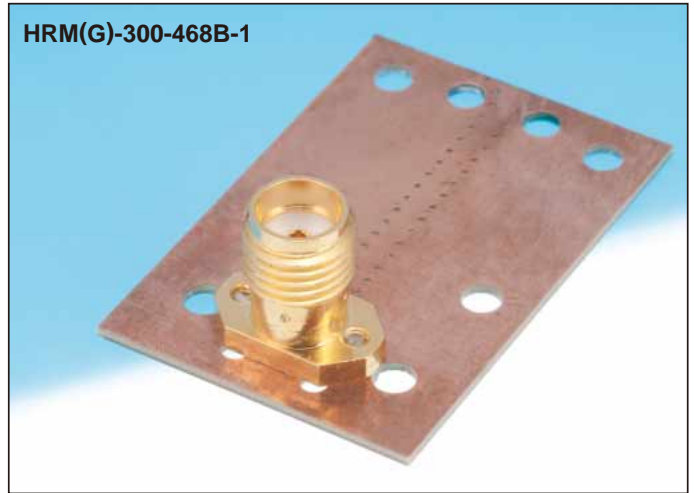
HRM(G) Series

Compatible with 28 GHz

HRM(G)-300-467B-1



HRM(G)-300-468B-1



## Features

### 1. Two mounting methods

This connector is capable of being mounted to the PCB edge or vertically.

### 2. Capable of handling frequencies up to 28 GHz

### 3. Easy mounting

Easily mounts with the use of just one fastening screw.

### 4. Mounts to PCBs of various thicknesses

This series can be mounted to various PCB thicknesses of 0.7 mm or more all while utilizing just one mounting screw.

### 5. RoHS compliant

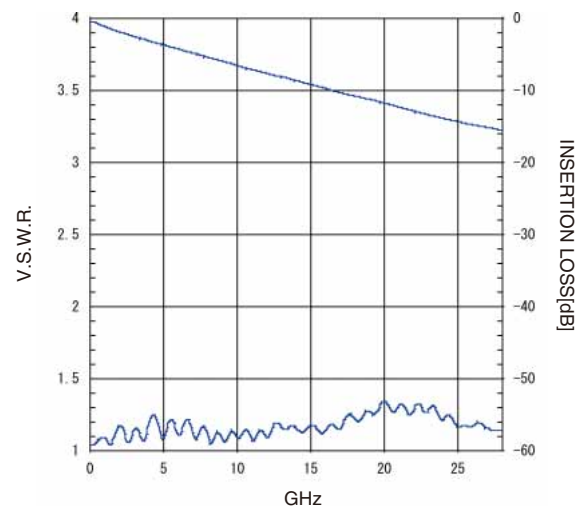
Environmentally friendly, produced without RoHS restricted substances.

## Application

Measuring devices, transmission characteristics measurement, radio communication equipment, high-frequency modules, radio power amplifier, high-speed routers, high-speed switches, broadcasting equipment, other equipment compatible with high frequency, etc.

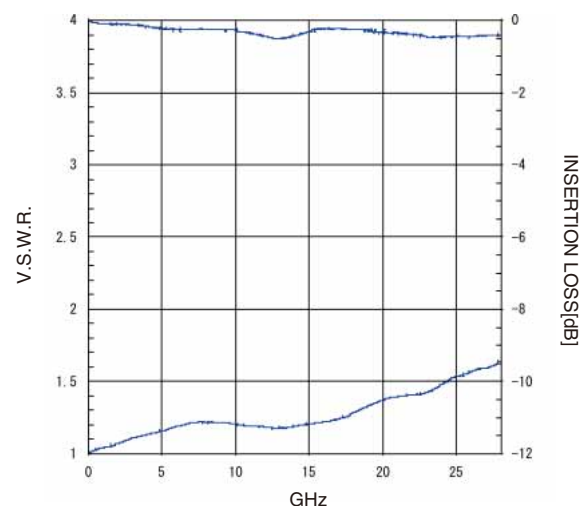
### High-Frequency Characteristics (Typical Value)

#### HRM(G)-300-467B-1 High Frequency Characteristics



\*The line length of the measuring PCB is 73 mm.

#### HRM(G)-300-478B-1 High Frequency Characteristics



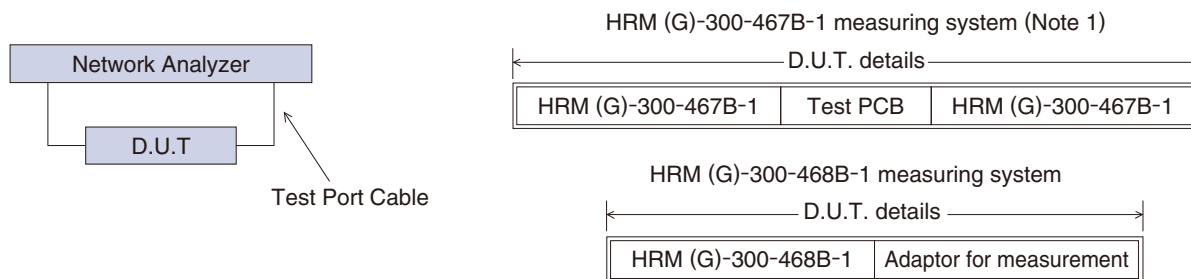
## Product specification

Rating	Nominal Characteristic Impedance	50 Ω	Operating Temperature Range -55°C to 85°C (≤ 95% RH)	
	Rated Frequency	DC - 28GHz	Storage Temperature Range -55°C to 85°C (≤ 95% RH)	

Item	Specification	Condition		
1.Contact resistance	Center: 4 mΩ or less Exterior: 4 mΩ or less	Measured at 100 mA or less		
2. Insulation resistance	5000 mΩ or more	Measured at 500V		
3.Withstanding voltage	No flashover or breakdown	AC 1000V for one minute		
4.Voltage standing wave ratio (*)	Product Name	DC - 20GHz	20GHz - 28GHz	
	HRM (G)-300-467B-1	1.4 or less	1.7 or less	
	Product Name	DC - 18GHz	18GHz - 20GHz	20GHz - 28GHz
	HRM (G)-300-468B-1	1.4 or less	1.5 or less	1.7 or less
5.Repeat performance	Contact resistance Center: 6 mΩ or less Exterior: 6mΩ or less No breakage, cracking, or loosening to parts	Insertion/extraction 500 times		
6.Vibration resistance	No electric outage of 1 μ or greater No breakage, cracking, or loosening to parts	10 cycles in each of three directions at frequency 10 to 2,000 Hz, half amplitude 0.75 mm, acceleration of 196 m/s <sup>2</sup>		
7.Shock resistance	No electric outage of 1μ or greater No breakage, cracking, or loosening to parts	Frequency 1960 m/s <sup>2</sup> , duration 6 ms, sine half-wave, 3 cycles in each of the 3 axis		
8.Humidity resistance to temperature/humidity cycle	Contact Resistance: 100 mΩ or more (when highly humid) Insulation Resistance: 5000 mΩ or more (when dry) No breakage, cracking, or loosening to parts	10 cycles (240 hours) at temperature +25 to 65°C and humidity 90% to 96%		
9.Temperature cycle	No breakage, cracking, or loosening to parts	Temperature: -55°C → - → +85°C → -°C Time: 5 cycles of the following. 30 min. → 3 min. → 30 min. → 3 min.		
10.Salt water spray	No marked corrosion	Continuous spraying of 5% salt water for 48 hours		

\* Measurement system of voltage standing wave ratio (V.S.W.R.)

The specification values of the above V.S.W.R. are the measurement values of the following diagram.



(Note 1) Measured with HRM (G)-300-467B-1 mounted on a 50Ω glass epoxy PCB

## Material

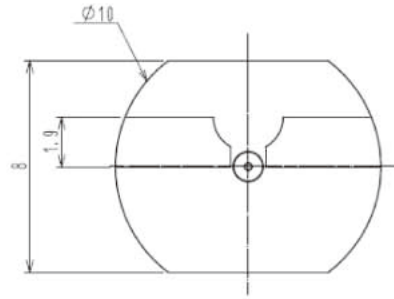
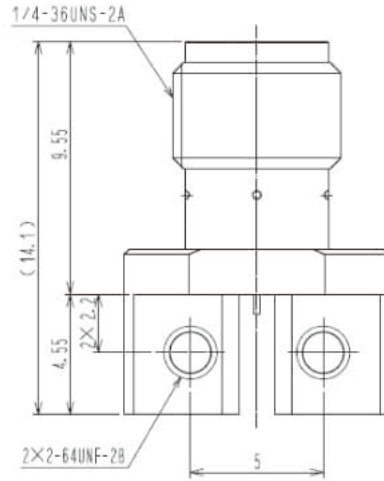
### HRM (G)-300-467B-1, HRM (G)-300-468B-1

Part	Material	Finish
R shell	Copper	Gold plating
Insulator	PTFE resin	—
Female contact	Beryllium copper	Gold plating

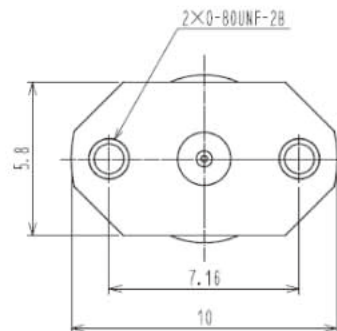
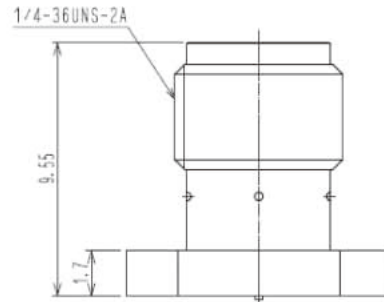
## ■ Receptacle



Part Number	HRS No.	RoHS
HRM (G)-300-467B-1	CL323-0937-0	YES



Part Number	HRS No.	RoHS
HRM (G)-300-468B-1	CL323-0924-8	YES



**USA:**

**HIROSE ELECTRIC (U.S.A.), INC. Headquarters**  
 2688 Westhills Court, Simi Valley, CA 93065-6235  
 Phone : +1-805-522-7958  
 Fax : +1-805-522-3217  
<http://www.hiroseusa.com>

**USA:**

**HIROSE ELECTRIC (U.S.A.), INC. San Jose Office**  
 20400 Stevens Creek Blvd., Ste 250, Cupertino,  
 CA 95014  
 Phone : +1-408-253-9640  
 Fax : +1-408-253-9641  
<http://www.hiroseusa.com>

**USA:**

**HIROSE ELECTRIC (U.S.A.), INC. Detroit Office (Automotive)**  
 37677 Professional Center Drive, Suite #100C  
 Livonia, MI 48154  
 Phone : +1-734-542-9963  
 Fax : +1-734-542-9964  
<http://www.hiroseusa.com>

**THE NETHERLANDS:**

**HIROSE ELECTRIC EUROPE B.V.**  
 Hogehillweg #8 1101 CC Amsterdam Z-0  
 Phone : +31-20-6557460  
 Fax : +31-20-6557469  
<http://www.hiroseeurope.com>

**GERMANY:**

**HIROSE ELECTRIC EUROPE B.V. GERMAN BRANCH**  
 Herzog-Carl-Strasse 4 D-73760 Ostfildern  
 (Scharnhauser Park)  
 Phone : +49-711-4560-02-1  
 Fax : +49-711-4560-02-299  
<http://www.hirose.de>

**UNITED KINGDOM:**

**HIROSE ELECTRIC EUROPE B.V. UK BRANCH**  
 First Floor, St Andrews House, Caldecotte Lake  
 Business Park, Milton Keynes MK7 8LE  
 Phone : +44-1908-369060  
 Fax : +44-1908-369078  
<http://www.hirose.co.uk>

**CHINA:**

**HIROSE ELECTRIC (SHANGHAI) CO., LTD.**  
 1601,Henderson Metropolitan,NO.300 ,East Nanjing  
 Road,Huangpu District, Shanghai,China 200001  
 Phone : +86-21-6391-3355  
 Fax : +86-21-6391-3335  
<http://www.hirose-china.com.cn>

**CHINA:**

**HIROSE ELECTRIC (SHANGHAI) CO., LTD. BEIJING BRANCH**  
 A1001, Ocean International Center, Building 56# East 4th  
 Ring Middle Road, Chao Yang District, Beijing, 100025  
 Phone : +86-10-5165-9332  
 Fax : +86-10-5908-1381  
<http://www.hirose-china.com.cn>

**CHINA:**

**HIROSE ELECTRIC TECHNOLOGIES (SHENZHEN) CO., LTD.**  
 Room 09-13, 19/F, Office Tower Shun Hing Square, Di Wang Commercial Centre  
 5002, ShenNanDong Road, ShenZhen City, Guangdong Province, 518008  
 Phone : +86-755-8207-0851  
 Fax : +86-755-8207-0873  
<http://www.hirose-china.com.cn>

**HONG KONG:**

**HIROSE ELECTRIC HONGKONG TRADING CO., LTD.**  
 Room 1001, West Wing, Tsim Sha Tsui Centre, 66  
 Mody Road, Tsim Sha Tsui East, Kowloon, Hong Kong  
 Phone : +852-2803-5338  
 Fax : +852-2591-6560  
<http://www.hirose-hongkong.com.hk>

**TAIWAN:**

**HIROSE ELECTRIC TAIWAN CO., LTD.**  
 103 8F, No.87, Zhengzhou Rd., Taipei  
 Phone : +886-2-2555-7377  
 Fax : +886-2-2555-7350  
<http://www.hirose-taiwan.com.tw>

**KOREA:**

**HIROSE KOREA CO., LTD.**  
 1261-10, Jeoungwhang-Dong, Shihung-City,  
 Kyunggi-Do 429-450  
 Phone : +82-31-496-7000,7124  
 Fax : +82-31-496-7100  
<http://www.hirose.co.kr>

**SINGAPORE:**

**HIROSE ELECTRIC SINGAPORE PTE. LTD.**  
 10 Anson Road #26-16 International Plaza 079903  
 Phone : +65-6324-6113  
 Fax : +65-6324-6123  
<http://www.hirose-singapore.com.sg>

**INDIA:**

**HIROSE ELECTRIC SINGAPORE PTE. LTD. BANGALORE LIAISON OFFICE**  
 Unit No.03, Ground Floor, Explorer Building International Tech  
 Park Whitefield Road, Bangalore 560066 Karnataka, India  
 Phone : +65-6324-6113  
 Fax : +65-6324-6123  
<http://www.hirose-singapore.com.sg>



**HIROSE ELECTRIC CO.,LTD.**

6-3,Nakagawa Chuoh-2-Chome,Tsuzuki-Ku,Yokohama-Shi 224-8540,JAPAN  
 TEL: +81-45-620-3526 Fax: +81-45-591-3726  
<http://www.hirose.com>  
<http://www.hirose-connectors.com>