NEW

Low-Cost SMA Coaxial Connectors (Version 2)

HRM(V) Series

Scheduled to be discontinued

Features

1. Reduced cost

A change in the manufacturing methods makes the connectors more economical to use.

2. Complete compatibility with SMA Coaxial Connectors

3. High degree of impedance matching

V.S.W.R. of 1.2 max. for frequencies of DC to 10 GHz
V.S.W.R. of 1.3 max. for frequencies of 10 to 18 GHz

4. High durability

500 mating /un-mating cycles, with corresponding connector.

5. RoHS compliant

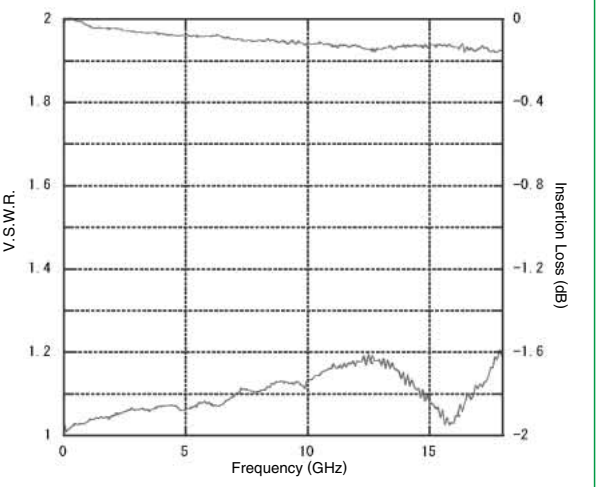
All components and materials comply with the requirements of EU Directive 2002/95/EC.

Applications

Mobile communications base stations, microwave equipment, measuring instrumentation and other applications requiring use of reliable coaxial connections with SMA connectors.

●Typical Data

Measurement system	HRM(V) Series	Measurement Adapter



Apr.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

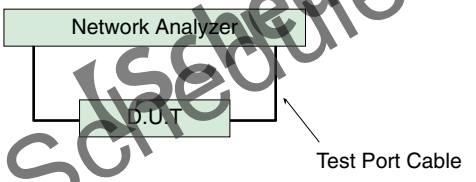
■Specifications

Ratings	Nominal characteristic impedance	50Ω	Operating temperature range	-55℃ to +85℃
	Frequency range	DC to 18 GHz	Operating relative humidity	95% max.

Item	Specification	Conditions
1.Insulation resistance	5000M Ω min.	500V DC
2.Withstanding voltage	No flashover or insulation breakdown	1,000 V AC / 1 minute
3.Contact resistance	Center contact: 6 mΩ max. Outer shell: 6 mΩ max.	100 mA max.
4.Center contact retention	0.3 N min.	Measured with 0.9017 mm dia. pin gauge
5. V.S.W.R.*	1.2 max. 1.3 max.	DC to 10 GHz 10 to 18 GHz
6.Vibration	No electrical discontinuity of 1 μs or longer No damage, cracks, or parts dislocation	Frequency: 10 to 2,000 Hz, single amplitude of 0.75 mm, acceleration of 196 m/s², 4 hours in each of the 3 directions
7.Moisture resistance	Insulation resistance: 100 MΩ min. (high humidity) Insulation resistance: 5,000 MΩ min. (dry) No damage, cracks, or parts dislocation	10 cycles (240 hours) at a temperature of +25 to +65℃, and humidity of 90 to 98%
8.Temperature cycle	Contact resistance Center contact: 8 mΩ max. Outer shell: 8 mΩ max. No damage, cracks, or parts looseness	Temperature: -55℃ → +5℃ to +35℃ → +85℃ → +5℃ to +35℃ Time: 30 min. → 5 min. → 30 min. → 5 min. 5 cycles
9.Durability	Contact resistance Center contact: 8 mΩ max. Outer shell: 8 mΩ max. No damage, cracks, or parts dislocation	500 cycles
10.Salt spray	No corrosion	5% salt water solution, 48 hours

∗V.S.W.R. Measurement System

Measured as shown on the block diagram below.



Note 1: Board connectors were measured while mounted to a dedicated adapter.

■Materials / Finishes

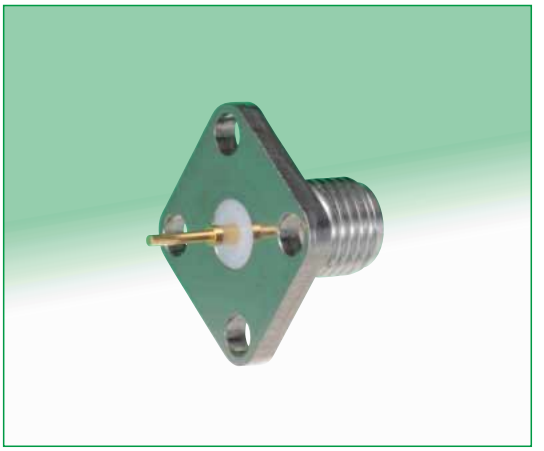
●Receptacle

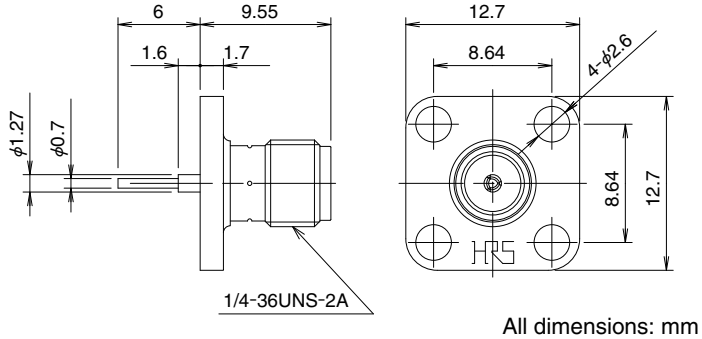
Part	Material	Finish
Shell	Stainless steel	Passivated
Female center contact	Beryllium copper	Gold plated
Center contact	Brass	Gold plated
Insulator	PTFE	————

Apr.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

(Scheduled to be discontinued)

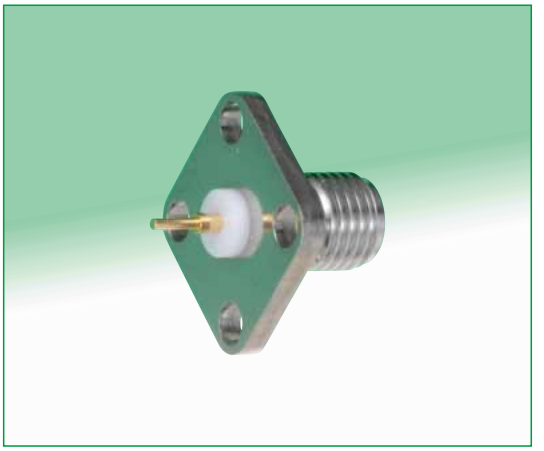
■Receptacles

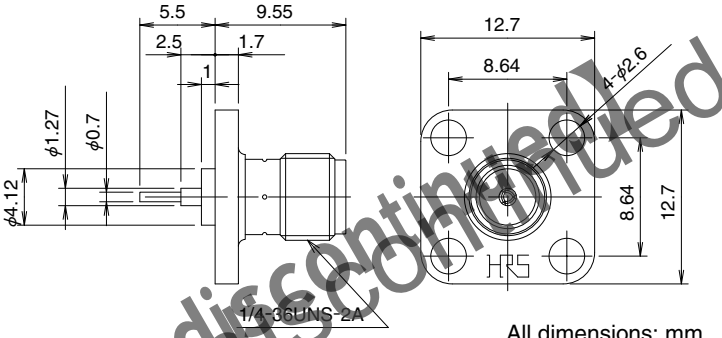




All dimensions: mm

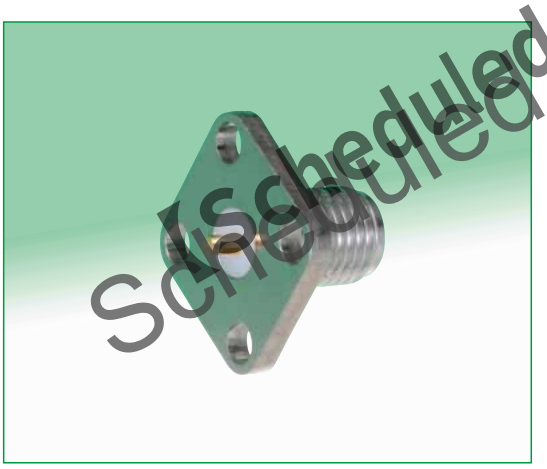
Part Number	CL No.	RoHS
HRM(V)-301S	323-0884-5	YES

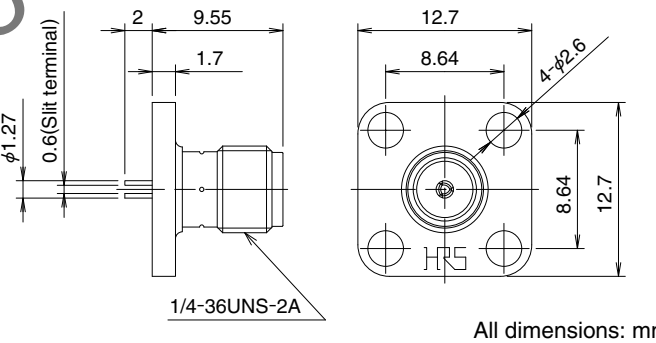




All dimensions: mm

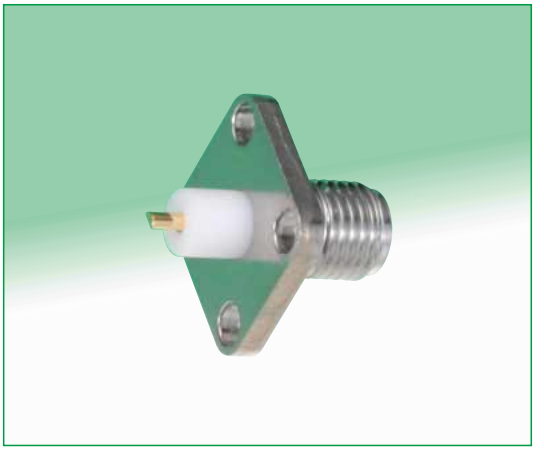
Part Number	CL No.	RoHS
HRM(V)-302S	323-0885-8	YES

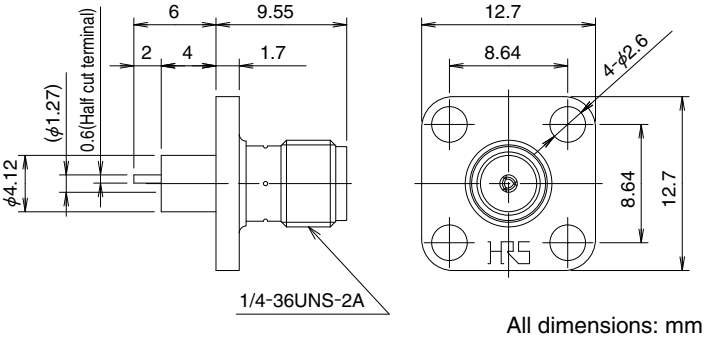




All dimensions: mm

Part Number	CL No.	RoHS
HRM(V)-304S	323-0886-0	YES





All dimensions: mm

Part Number	CL No.	RoHS
HRM(V)-306S	323-0879-5	YES

Scheduled to be discontinued

Apr.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

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. North California 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. Dallas Office
1701 N. Greenville Ave. Ste 817, Richardson, TX 75081
Phone : 1-469-330-9200
Fax : 1-469-330-9205
http://www.hiroseusa.com

USA:
HIROSE ELECTRIC (U.S.A.), INC. Chicago Office
2777 Finley Road, Suite 28 Downers Grove, IL 60148
Phone : 1-630-916-1455
Fax : 1-630-916-1451
http://www.hiroseusa.com

USA:
HIROSE ELECTRIC (U.S.A.), INC. New York Office
510 Broadhollow Road, Suite 305, Melville, NY 11747
Phone : 1-516-249-5259
http://www.hiroseusa.com

USA:
HIROSE ELECTRIC (U.S.A.), INC. Detroit Office (Automotive)
37650 Professional Center Drive, Suite 120A, Livonia, MI 48154
Phone : 1-734-542-9963
Fax : 1-734-542-9964
http://www.hiroseusa.com

GERMANY:
HIROSE ELECTRIC GmbH
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

THE NETHERLANDS:
HIROSE ELECTRIC EUROPE B.V.
Beechavenue 46,1119 PV
Schiphol-Rijk
Phone : 31-20-6557490
Fax : 31-20-6557469
http://www.hiroseeurope.com

FINLAND:
Hirose Electric Europe B.V. Finland Office
Teknobulevardi 3-5 01530 VANTAA
Phone : 358-9-2517-8459
Fax : 358-9-2517-8460
http://www.hiroseeurope.com

UNITED KINGDOM:
HIROSE ELECTRIC UK LTD.
Crownhill Business Centre 22 Vincent Avenue Crownhill, Milton Keynes MK8 OAB
Phone : 44-1908-305400
Fax : 44-1908-305401
http://www.hirose.co.uk

CHINA:
HIROSE ELECTRIC CO., LTD. Beijing Office
Unit 1605, Block A, ZhuBang2000 BusinessCenter, No.100, Balizhuang Xili, Chaoyang District, Beijing, 10025
Phone : 86-10-5165-9332
Fax : 86-10-8586-1418
http://www.hirose-china.com.cn

CHINA:
HIROSE ELECTRIC (SHANGHAI) CO., LTD.
1501-02, Cross Tower Building 318 Fuzhou Road, Huang Pu District Shanghai, 200001
Phone : 86-21-6391-3355
Fax : 86-21-6391-3335
http://www.hirose-china.com.cn

CHINA:
HIROSE ELECTRIC CO., LTD. Shenzhen Office
Room 1902-05, Office Tower Shun Hing Square, DiWang Commercial Centre 5002 ShenNanDong Road, ShenZhen
Phne : 86-755-8207-0851
Fax : 86-755-8207-0873
http://www.hirose-china.com.cn

HONG KONG:
HIROSE ELECTRIC CO., LTD.
Unit 1102, Energy Plaza, 92 Granville Road, Tsim Sha Tsui East, Kowloon
Phone : 852-2803-5338
Fax : 852-2591-6560
http://www.hirose-hongkong.com.hk

TAIWAN:
HIROSE ELECTRIC TAIWAN CO., LTD.
No.28 Lane 247 Sec. 2 Yen Ping N,Rd.Taipei
Phone : 886-2-2557-7351,7352
Fax : 886-2-2552-9851
http://www.hirose-taiwan.com.tw

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

KOREA:
HIROSE KOREA CO., LTD.
(#2NA311,Shihwa Industrial Complex),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

Scheduled to be discontinued

Apr.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

Creative Links to World Electronics ®

HRS

HIROSE ELECTRIC CO.,LTD.
5-23,OSAKI 5-CHOME,SHINAGAWA-KU,TOKYO 141-8587,JAPAN
PHONE: 81-3-3491-9741, FAX: 81-3-3493-2933
http://www.hirose.com
http://www.hirose-connectors.com

The contents of this catalog are current as of date of publication. Contents are subject to change without notice for the purpose of improvements.