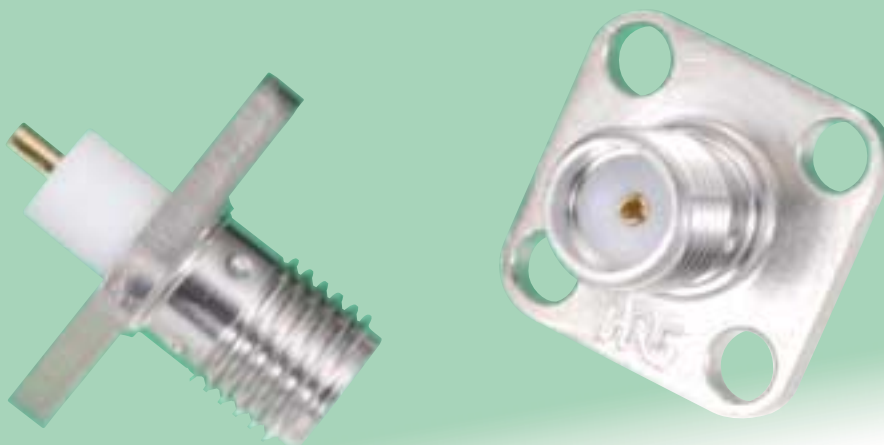


NEW

# Low-Cost SMA Coaxial Connectors (Version 2)

## HRM(V) Series



### 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.

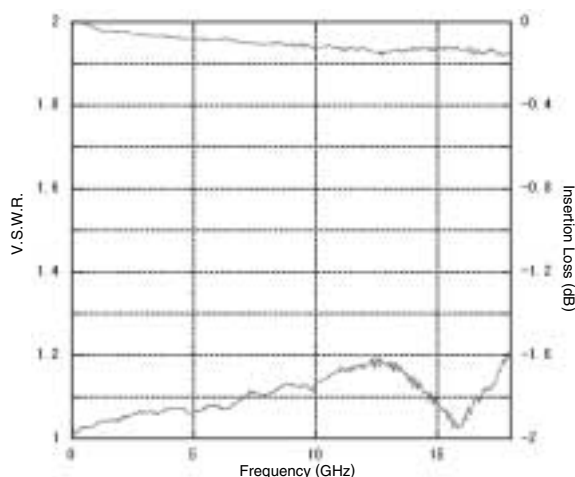
### Applications

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
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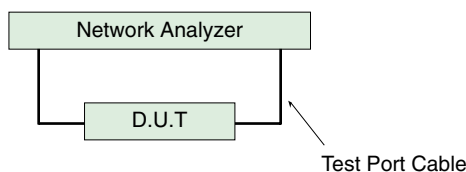
## Specifications

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/s <sup>2</sup> , 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.



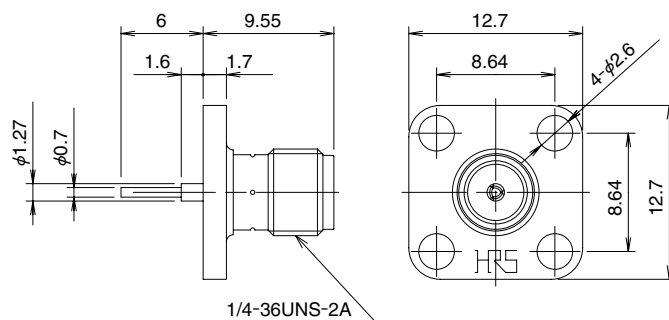
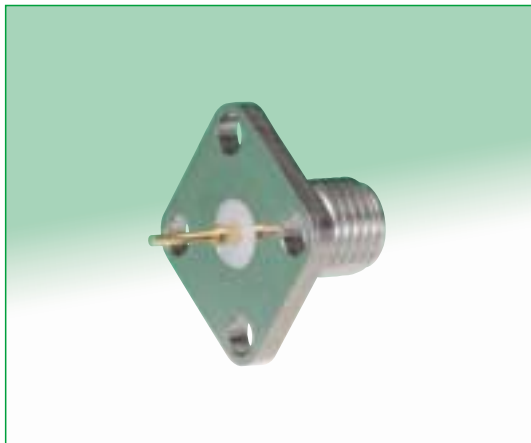
Note 1: Board connectors were measured while mounted to a dedicated adapter.

## Materials / Finishes

### ●Receptacle

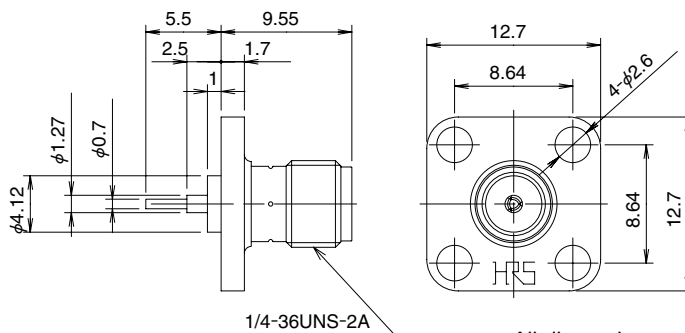
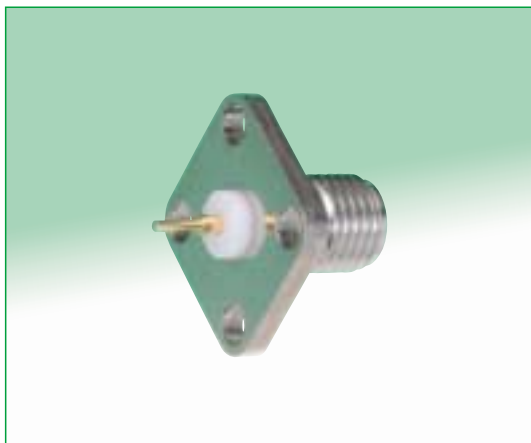
Part	Material	Finish
Shell	Stainless steel	Passivated
Female center contact	Beryllium copper	Gold plated
Center contact	Brass	Gold plated
Insulator	PTFE	—

## Receptacles



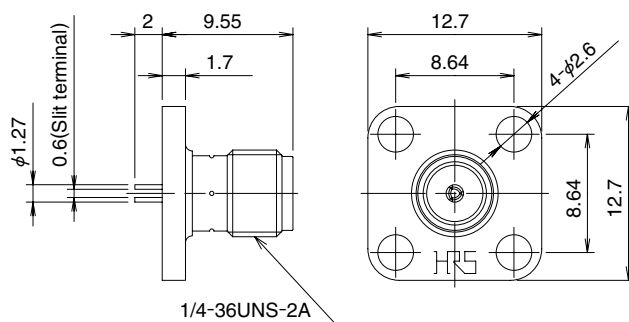
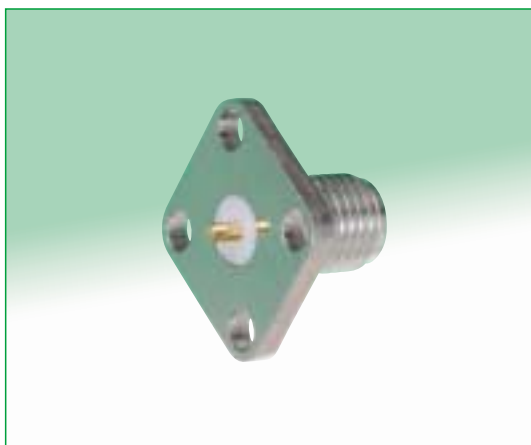
All dimensions: mm

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



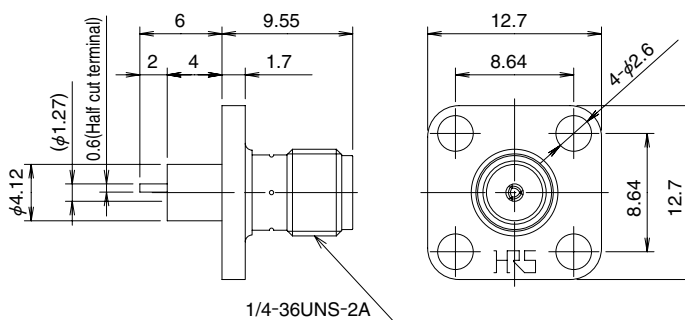
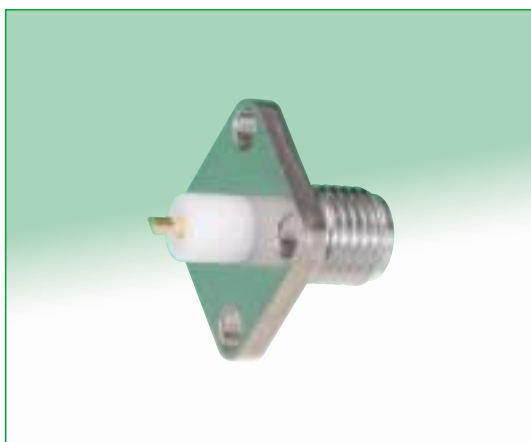
All dimensions: mm

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