

Rotary Joints

HRM-RPA Series



Features

1. Long Life

These non-contact rotary joints have a long life of 10^3 hours or greater (at 500 r.p.m.).

2. High Performance

High frequency characteristics feature extremely low loss and a high degree of matching.

V.S.W.R. 1.25 or less (HRM-RPA-JJ-3 1.5~1.7GHz)

3. Low Torque Rotation

Rotation at low torque permits high speed rotation.

Torque of 4.9mN·m

Product Specifications

Ratings	Frequency range (Note) Characteristic impedance Maximum Input Power (Note)	1.5 to 12.4 GHz 50 ohms 1 to 30 W	Operating temperature range Operating relative humidity	-10°C to +65°C 95% Max.
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NOTE: The frequency range and maximum usable power will depend on the model.

Item	Standard	Conditions
1.Vibration	No damage, cracks, or parts dislocation	Frequency of 10 to 500 Hz, overall amplitude of 1.5 mm, acceleration of 98 m/s ² for 4 hours in each of 3 directions
2.Shock		Acceleration of 98 m/s ² , sine half-wave waveform, 3 cycles in each of the 3 axis

●The test method conforms to MIL-STD-202.

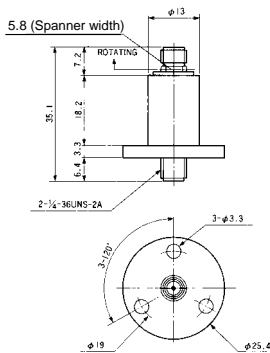
Materials

Part	Materials	Finish
Body	Brass	Nickel plating
Insulator	PTFE	—
Female contact	Beryllium copper	Gold plating
Ball bearings	—	—

Specifications

Part Number	HRM-RPA-JJ-3(40)	HRM-RPA-JJ(40)
Frequency Range (GHz)	1.5~1.7	5~12.4
V.S.W.R.(Max)	1.25	1.5
Insertion Loss (dB Max)	0.4	0.4
WOW (dB/360° Max)	0.2	0.1
V.S.W.R. Rotational (360° Max)	0.2	0.1
Rotational Speed (R·P·M)	500	500
Durability(Insertion/withdrawal) (hrs)	1,000 (at 500R·P·M)	1,000 (at 500R·P·M)
Starting Torque (mN·m Max)	4.9	4.9
Connectors	HRM-J	HRM-J
Weight (g)	30	30
RoHS	YES	

External Dimensions



Typical Data

