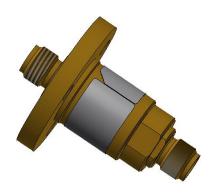
mplate I D-00015N

Rotary Joint || BN 835047C0011





Radio frequency characteristics

Channel designation	Channel 1	
Coaxial interface connector / material / surface finish	SMA-f (50 Ω) / copper alloy / gold plated	
Interface orientation	style I	
Frequency range	DC to 18 GHz	
Peak power rating	3 kW @ sea level 90 W @ 55000 feet	
Average power rating	200 W @ 1 GHz 40 W @ 15 GHz 30 W @ 18 GHz	
VSWR, max. / typ.	1.3 @ DC to 10 GHz 1.4 @ 10 to 18 GHz	
VSWR variation over rotation, max. / typ.	0.05	
Insertion loss, max. / typ.	0.25 dB @ DC to 10 GHz 0.30 dB @ 10 to 18 GHz	
Insertion loss variation over rotation, max. / typ.	0.05 dB	
Phase variation over rotation, max. / typ.	1 deg.	
DC carrying capability	0.5 A, 48 VDC @full RF avg. power 2 A 48 VDC @ RF avg. power 5 W 5 A RF1). 48 VDC @ RF avg. power 5 W	

^{RF1)} Conditions: - applied for max. 1 x 10^6 revolutions or 50 h.



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Mechanical characteristics

Rotating speed, max. / nominal	300 rpm / 200 rpm	
Life, min.	5 x 10 ⁶ revolutions	
Torque (room / min. temperature), max.	2.5 Ncm / 1.0 Ncm @ start-up 2.0 Ncm / 0.8 Ncm @ rotation	
Interface loads, max.	±1 N in axial direction ±1 N in radial direction	
Case material	copper alloy	
Case surface finish	silver plated painted none	
IP protection level	IP40	
Weight, approx.	0.028 kg	
Marking	adhesive label	

Environmental conditions

Operation				
Application	airborne, plane			
Operating altitude, max.	55.000 ft			
Ambient temperature range	-55 to +85°C			
Relative humidity, max.	100% (non-condensing)			
Shock	6 g / 11 ms, Sawtooth			
Vibration	Random Vibration per RTCA DO-160 for Equipment Installed in Fixed Wing Aircraft with Turbojet or Turbofan Engines, Class C Curve (4.12 Grms)			
	Frequency - Hz	Acceleration Spectral Density - g²/Hz		
	10 40 51.7 500 2000	0.012 0.012 0.020 0.020 0.00126		
Storage				
Ambient temperature range	-55 to +85°C			
Relative humidity, max.	95% (non-condensing)			

Applicable documents

Drawing	835047C0011-0E, Issue B	
Product manual	M36066	
Technical information	"Rotary Joints – Glossary", technical document TD-00021, Spinner GmbH	