

2 Channel Rotary Joint || BN 835101



Outline and dimensions as per drawing 835101-0E Issue A.

Radio frequency channel characteristics

Interface type / material / surface finish	3.5mm-f (50 Ω) / copper alloy / gold plated
Interface orientation	style I
Frequency range	8 to 8.5 GHz
Peak power capability	1 kW
Average power capability	50 W
VSWR, max.	1.3
VSWR variation over rotation, max.	0.05
Insertion loss, max.	0.3 dB

DC-power transmission channel characteristics

Interface type DC-Input Recommended external connector	JST B3B-XH-A XHP-3	Pin1: 0V _{DC} Pin2: 12V _{DC} Pin3: 0V _{DC}
Interface type DC-Output Recommended external connector	JST B2B-XH-A XHP-2	Pin1: 12V _{DC} Pin1: 0V _{DC}
Input Voltage	12 V DC -10%/ +20%	Optionally 24 V DC available
Output-Voltage	12 V DC ±3%	Optionally 24 V DC available
Output Current, continuous	1.7 A	Over full temperature range
Current, peak	2.0 A	For T _{amb.} max. 40 °C or t max. 1 min
Output Voltage Ripple, max.	40 mV	
Efficiency, typ.	85%	@ full load
Applied standards	DIN EN 55022 DIN EN 61000-4-2 DIN EN 61000-4-3 DIN EN 61000-4-4 DIN EN 61000-4-6	Radio disturbance characteristics (B) ESD immunity RF immunity, radiated Transient/ burst immunity RF immunity, conducted
Applicable EU Directive	EMC Directive 2004/108/EC	

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General mechanical data

Rotating speed, max.	2000 rpm
Life, min.	100 x 10 ⁶ revolutions
Starting torque, max.	TBD
Torque during rotation, max.	TBD
Axial load mounting plane on output side, max.	±10 N
Radial load on mounting plane on output side, max. (during rotation)	±200 N
Case material	aluminum alloy
Case surface finish	chromate conversion coat per MIL-DTL-5541
Weight, approx.	0.5 kg
Marking	adhesive label

General environmental conditions

Operation	
Ambient temperature range	-40 to +65 °C
Relative humidity, max.	95% (non-condensing)
IP protection level	IP40 per EN 60529
Shock	Typ. 30 g / 11 ms acc. to MIL-STD-810G
Storage	
Ambient temperature range	-40 to +85°C
Relative humidity, max.	95% (non-condensing)