

High voltage 4 kV DC-DC block

9077.41.0031

Properties

- Galvanic isolation of the RF signal path
- Broadband operation up to 3000 MHz
- Maintenance free
- Protects against electromagnetic interference caused by traction return current
- Provide ground potential separation



Product configuration

Main path connectors	Port 1: 7/16 jack (female) Port 2: 7/16 jack (female)
Mounting and grounding	MH110 (bulkhead mounting)
Side of bulkhead	Port 2

Interface and material data

Housing material / plating	POM (Polyoxymethylene)
Center contact, material / plating	Port 1: Copper Beryllium Alloy / Silver Plating Port 2: Copper Beryllium Alloy / Silver Plating

Electrical data

Impedance	50 Ω
Frequency frame	160 MHz to 3000 MHz
Return loss typical	≥ 22 dB
Insertion loss typical	≤ 0.2 dB
CW power frame	≤ 500 W
Peak power frame	≤ 1000 W
PIM 3rd order	-150 dBc
Galvanic isolation inner conductor	Yes
Galvanic isolation outer conductor	Yes
Blocking voltage center conductor	≤ 4000 V DC
Blocking voltage outer conductor	≤ 4000 V DC
Leakage current	≤ 5 μ A
Test voltage	5000 V
Test leakage current max	10 μ A

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Electrical bands	
	Range 1
Frequency range	300 MHz ... 2500 MHz
Return loss typical	≥ 26.44 dB
Insertion loss	≤ 0.1 dB
Power avg. / peak	≤500 W / ≤1000 W
PIM 3rd order	-150 dBc typ.

Mechanical data	
Weight	459 g

Environmental data	
Operation temperature	-40 °C ... 85 °C
Storage temperature	-40 °C ... 85 °C
Ingress protection (IP Rating)	IP65
Thermal shock according	MIL-STD-202, Method 107, Cond. B
Vibration according	MIL-STD-202, Method 204, Cond. D
Moisture resistance according	MIL-STD-202, Method 106

Compliance			
Item number	Directive / Regulation	Rating	Exemptions / Details
84012170	RoHS 2011/65/EU and (EU) 2015/863	Compliant with exemption	6c
	REACH 1907/2006 Article 33 SVHC	Contains one or more SVHC >0,1%	CAS: 3147-75-9 2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)
			CAS: 7439-92-1 Lead

Ordering Information Table	
Item number	Item description
84012170	9077.41.0031

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