## High voltage 18 kV DC-DC block

9077.31.0002

## **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
- · Tested up to 18 kV











Product configuration		
Main path connectors	Port 1: 4.3-10 plug (male)	
Main path connectors	Port 2: 4.3-10 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: Brass / Silver Plating
Center contact, materiar/ plating	Port 2: Copper Beryllium Alloy / Silver Plating

Electrical data		
Impedance	50 Ω	
Frequency frame	180 MHz to 3000 MHz	
Return loss typical	≥ 16 dB	
Insertion loss typical	≤ 0.5 dB	
CW power frame	≤ 80 W	
Peak power frame	≤ 250 W	
PIM 3rd order	-150 dBc	
Galvanic isolation inner conductor	Yes	
Galvanic isolation outer conductor	Yes	
Blocking voltage center conductor	≤ 15000 V DC	
Blocking voltage outer conductor	≤ 15000 V DC	
Leakage current	≤ 50 µA	
Test voltage	18000 V	
Test leakage current max	100 μΑ	



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**Electrical bands** 

	Range 1	
Frequency range	380 MHz 3000 MHz	
Return loss typical	≥ 20 dB	
Insertion loss	≤ 0.5 dB	
Power avg. / peak	≤80 W / ≤250 W	
PIM 3rd order	-150 dBc typ.	
Electrical remarks		
Electrical remarks		The voltage test is conducted at 18000 V DC for 1 minute including transient.
Mechanical data		
Weight		705 g
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Environmental date	<u> </u>	
Operation temperatu	ro	-40 °C 85 °C

Storage temperature	-40 °C 85 °C
Ingress protection (IP Rating)	Mated / IP65, according to IEC 60529
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	

Compliance			
Item number	Directive / Regulation	Rating	Exemptions / Details
85182045	RoHS 2011/65/EU and (EU) 2015/863	Compliant with exemption	6c
63162043	REACH 1907/2006 Article 33 SVHC	Contains one or more SVHC >0,1%	CAS: 7439-92-1 Lead

Ordering Information Table		
Item number	Item description	
85182045	9077.31.0002	

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