SPE-T1-M12MRM-90 - SPE PCB connector

1363338

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SPE PCB connector, design: SPE, degree of protection: IP65/IP67, number of positions: 2, material: LCP, connection method: THR solder connection, cable outlet: straight, color: black, Single Pair Ethernet

Your advantages

- Easily integrated: M12 male and female versions for established inductive sensors and flying leads
- Cross-application: range of up to 1000 m, data rates of up to 1 Gbps, and power of up to 50 W
- Totally protected: Advanced Shielding Technology provides a reliable shield connection for network cables, even under extreme environmental conditions
- Future-proof: standardized connectors and cables in accordance with IEC 63171-5

Commercial data

Item number	1363338
Packing unit	80 pc
Minimum order quantity	80 pc
Sales key	ABNBEA
Product key	ABNBEA
GTIN	4063151708429
Weight per piece (including packing)	9,625 g
Weight per piece (excluding packing)	2,739 g
Customs tariff number	85366930
Country of origin	DE

Technical data

Product properties

Type	SPE
Sensor type	Single Pair Ethernet
Number of positions	2
Type of packaging	Tape and Reel
[W] tape width	44.00 mm
[A] coil diameter	330.00 mm
[W2] coil overall dimension	50.40 mm
Number of slots	1
Cable outlet	straight
Thread type	M12

Insulation characteristics

Overvoltage category	II
Degree of pollution	2

Electrical properties

Maximum load current	4 A
Rated voltage (III/2)	72 V DC
Rated surge voltage	2250 V DC
Rated surge voltage (III/2)	1500 V
Rated current	4 A
Frequency range	600 MHz
Insulation resistance	min. 1 TΩ
Contact resistance	20 mΩ
Transmission medium	Copper
Transmission characteristics (category)	CAT B (IEC 63171)
Transmission speed	1 Gbps
Power transmission	PoDL in accordance with IEEE standard 802.3bt

Output data

Transmission frequency	600.00 MHz

Connection data

Connection technology

Connection method	THR solder connection

Interfaces

Transmission speed	1 Gbps1 Gbps

Dimensions

Width	15.3 mm

Height	14.4 mm
Length	31.6 mm
Installed height	12.00 mm
Orientation to PCB	90.00 °

Material specifications

Color	black
Color of the housing part	black
Flammability rating according to UL 94	V0
Housing material	LCP
Housing surface material	Ni/Sn
Contact material	Cu alloy
Contact surface material	Au/Ni

Cable/line

Test voltage Core/Core	1000 V DC
Test voltage Core/Shield	2250.00 V DC
Test voltage, cable	300 V

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100
Insertion force per signal contact	< 30.00 N (in accordance with IEC 63171)
Extraction force per signal contact	< 30 N (in accordance with IEC 63171)
Smallest bending radius	21,2 mm

Environmental and real-life conditions

Test specification

Type of test	Vibration test
Specification	IEC 60068-2-6
Frequency	10-500 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm
Acceleration	50.00 m/s²
Test duration	2.00 h

Test specification

Specification	IEC 63171
Corrosive stress	IEC 60512-11-7
Contact resistance R_1	20.00 mΩ

Test specification

Type of test	Mechanical service life with corrosion test
Specification	DIN EN 60512-9-1

Test specification

Type of test	Shock testing
Specification	IEC 60068-2-27
Acceleration	150.00 m/s²
Number of shocks per direction	2000.00

Mounting

Mounting type	PCB mounting

Processing notes

Process	Reflow
Moisture Sensitive Level	MSL 1
Classification temperature T_c	260 °C
Solder cycles in the reflow	3

Classifications

ECLASS

ECLASS-13.0	27460201
ECLASS-15.0	27460201

ETIM

ETIM 10.0	EC002637

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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PHOENIX CONTACT B.V.
Hengelder 56 6902 PA Zevenaar
Postbus 246 6900 AE Zevenaar
(0316) 59 17 20
sales@phoenixcontact.nl