SPE-T1-M8MRM-90 - SPE PCB connector

1163795

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SPE PCB connector, SPE, Single Pair Ethernet, CAT B (ISO/IEC 63171) (1 Gbps), 2-position, connection method: THR solder connection, material: Metal, degree of protection: IP65/IP67

Your advantages

- Connectors in accordance with IEC 63171-2
- THR solderable
- Data transmission up to 600 MHz
- Packaging available for automated pick and place assembly

Commercial data

Item number	1163795
Packing unit	100 pc
Minimum order quantity	100 pc
Sales key	AB13
Product key	ABNBDA
GTIN	4063151176136
Weight per piece (including packing)	8.14 g
Weight per piece (excluding packing)	2.117 g
Customs tariff number	85366930
Country of origin	DE

Technical data

Product properties

Product type	Circular connectors (device side)
Type	SPE
Number of positions	2
Connection profile	SPE M8
Type of packaging	Tape and Reel
Number of slots	1
Shielded	yes
Thread type	M8

Insulation characteristics

Overvoltage category	I
Degree of pollution	2

Dimensions

Width	15.2 mm
Installed height	12.10 mm
Height	14.5 mm
Length	31.6 mm
Orientation to PCB	90.00 °

Material specifications

Flammability rating according to UL 94	V0
Housing material	Metal
Contact material	Copper alloy
Contact surface material	Gold
Contact carrier material	LCP

Electrical properties

Rated voltage (III/2)	72 V DC
Rated surge voltage	2250 V DC
Rated surge voltage (III/2)	1500 V
Rated surge voltage	1000 V DC
Rated current	4 A
Frequency range	5 Hz ... 500 Hz
Insulation resistance	> 1 TΩ
Contact resistance	20 mΩ (in accordance with IEC 63171)
Transmission medium	Copper
Transmission speed	1 Gbps
Transmission characteristics (category)	CAT B (ISO/IEC 63171)
Power transmission	PoDL

Connection data

Conductor connection

Connection method	THR solder connection
Contact connection type	Pin

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)

Interfaces

Signal type/category	Single Pair Ethernet CAT B (ISO/IEC 63171), 1 Gbps

Cable/line

Test voltage Core/Core	1000 V DC
Test voltage Core/Shield	2250.00 V DC
Halogen-free	yes
Resistance to oil	yes
Flame resistance	yes

Environmental and real-life conditions

Ambient conditions

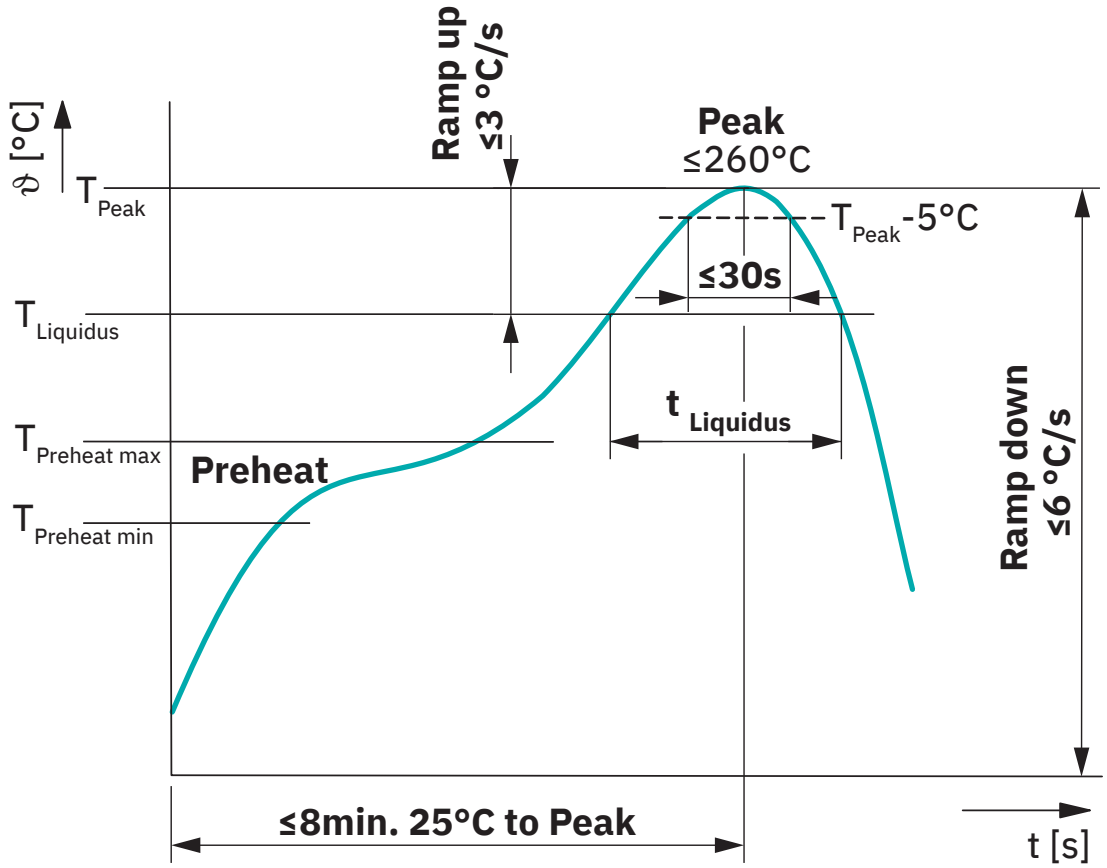
Degree of protection	IP65/IP67 (in combination with M8 housing screw connection)
	IP65/IP67
Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Resistance to oil	yes

Standards and regulations

Flame resistance	yes
Resistance to oil	yes

Drawings

Diagram



Classification reflow soldering profile

Classifications

ECLASS

ECLASS-13.0	27440110
ECLASS-15.0	27440110

ETIM

ETIM 10.0	EC003568

UNSPSC

UNSPSC 21.0	39121400

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 USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com