

R&M Single Pair Ethernet IEC 63171-1 Simplex PCB Jack



GENERAL DESCRIPTION

R&M Single Pair Ethernet Simplex PCB Jack are used as fixed connecting hardware for Printed Circuit Boards (PCB). The R&M SPE LC-Cu jack offers one SPE port according to IEC 63171-1 with pin contacts for through-hole soldering. It is suitable for delivery of Power over Data Line (PoDL) or SPE Power over Ethernet (SpoE) up to the highest levels (Class 15). The jack supports high data rate applications and frequencies of up to 600 MHz.

With the SPE Simplex PCB Jack a single xBase-T1 port or two daisy chain capable active xBase-T1 ports (bridging) or a passive duplex 10Base-T1S port can be integrated into any SPE device.

FEATURES

- Fulfills the requirements of Class T1-B according to the proposed ISO/IEC 11801-1 Am.1
- Connectivity complies with IEC 63171 and IEC 63171-1 components standard for SPE connectivity
- Shielded design for optimum EMC protection
- Supports PoE applications 1000Base-T1 (IEEE 802.3bp), 100Base-T1 (IEEE 802.3bw), 10Base-T1L (IEEE 802.3cg) and 10Base-T1S (IEEE 802.3cg)
- Optional Light guide for busy indication of port (LED to be placed separately on PCB)
- PCB Jack suitable for manual or wave soldering process (THT)

MATERIAL

DESCRIPTION	MATERIAL	SURFACE PLATING
General	Halogen free and ROHS III compliant materials	
Jack Housing	UL 94-V0 plastic PBT-GF10, anthracite	
Signal Contacts	Bronze (CuSn6)	0,7 µm gold plated over nickel
Shielding	Bronze (CuSn6)	3 µm tin plated

TECHNICAL DATA

DESCRIPTION	VALUE / VALUE RANGE	STANDARD
Number of ports	1	According IEC 63171-1
Number of contacts	2	

ELECTRICAL DATA

DESCRIPTION	VALUE / VALUE RANGE	STANDARD
Electrical Characteristics	Level 1	IEC 63171
Transmission Characteristics	Category B	IEC 63171

MECHANICAL DATA

DESCRIPTION	VALUE / VALUE RANGE	STANDARD
Mechanical Characteristics	MPL750	IEC 63171,
Interface Dimensions and Tolerances		IEC 63171-1

CLIMATICAL DATA

DESCRIPTION	TEMPERATURE RANGE	HUMIDITY
Operating	-20 °C to +60 °C	< 95% (non-condensing)
Installation	0 °C to +50 °C	

