

1663979

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Filtered RJ45 PCB connectors, design: THD, number of positions: 8 (8P8C), 100 Mbps, degree of protection: IP20, connection method: Female, Tray

Your advantages

- · Simplified Ethernet design process thanks to integrated filtering
- · Reduced PCB complexity and reduced EMC risks
- Tray packing

Commercial data

Item number	1663979
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AB12
Product key	ABNAFA
GTIN	4067923204201
Weight per piece (including packing)	8.7 g
Weight per piece (excluding packing)	6.1 g
Customs tariff number	85366930
Country of origin	CN



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Technical data

Product properties

Product type	Data connector (device side)
Sensor type	Universal
Number of positions	8
Note number of positions	8P8C
Connection profile	RJ45
Housing shield springs	No
Number of slots	1
Shielded	yes
Insulation characteristics	
Overvoltage category	I
Degree of pollution	2

Electrical properties

Rated surge voltage	1.5 kV DC
Rated current	0.5 A
Insulation resistance	> 500 MΩ
Transmission speed	100 Mbps
Transmission speed	10/100 Mbps

Connection data

Connection technology Connection method

Female

Dimensions

Width	16 mm
Height	19.8 mm
Length	17 mm
Installed height	16.80 mm
Orientation to PCB	180.00 °
Data pin length	3.00 mm

Material specifications

Material Metal surface contact area (top layer)	Au (0.762 μm/30 μ")
Material Metal surface contact area (middle layer)	Ni (1,270 μm min / 50 μ" min)
Material Metal surface soldering area (middle layer)	Ni (1,016 μm min / 40 μ" min)
Material Metal surface soldering area (top layer)	Sn (3,048 μm min / 120 μ" min)
Material	Copper alloy (Housing (shielding))



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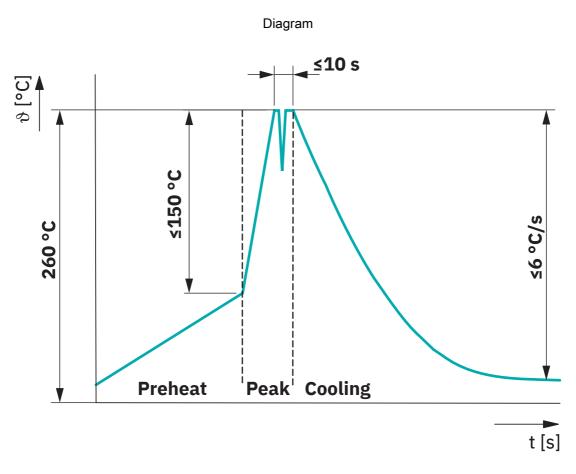
	Ni (0.762 μm min / 30 μ" min) (Housing shielding (top layer))
Material Contact	Phosphor bronze
Material	LCP (Housing (female/insert))
ble/line	
Test voltage Core/Shield	1.50 kV DC
Halogen-free	yes
Flame resistance	UL 94 V0
echanical properties	
Mechanical data	
Insertion/withdrawal cycles	> 750
Insertion force	< 20 N
Withdrawal force	< 20 N
Specification	IEC 60603-7
Ambient conditions	
Degree of protection (when plugged in)	IP20
Degree of protection	IP20
Ambient temperature (operation)	-40 °C 85 °C
Ambient temperature (storage/transport)	-40 °C 85 °C
andards and regulations	
Flame resistance	UL 94 V0
punting	
Processing notes	
Classification temperature T _c	260 °C
	260 °C
Classification temperature T _c ackaging specifications Type of packaging	260 °C



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Drawings



Classification wave soldering profile

Circuit diagram **PCB SIDE JACK SIDE ELECTRONICAL SPECIFICATIONS** 1. ACCORDING TO IEEE 802.3 CAP 1000pF 2KV 75Ω -(**J**8 (P1~P3):(J1~J2) = 1:1±5% (P4~P6):(J3~J6) = 1:1±5% 2. TURN RATIO @100KHz: **P8** \circ **∹** J7 3. PRIMARY INDUCTANCE: 350µH MIN @100KHz 0,1V 8mA DC BIAS 75Ω **∹** J5 75Ω 75Ω **∹ J**4 4. DC RESISTANCE: 1,2 OHMS MAX **P6** ○ **∹ J6** 5. INSERTION LOSS: 1-100MHz -1.2dB MAX **P5** 0 1CT:1CT 1-30MHz 30-60MHz 60-80MHz -16dB MIN -12dB MIN -10dB MIN 6. RETURN LOSS: **P4** 0 **√** J3 **P3** \circ -(J2 7. CROSS TALK: 1-100MHz -30dB MIN 8. COMMON TO COMMON MODE ATTENUATION: 1-100MHz -30dB MIN 9. ISOLATION: PHY SIDE TO LINE SIDE: 1500VAC or 2250VDC

Circuit diagram



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Classifications

ECLASS

ECLASS-13.0	27460201
ECLASS-15.0	27460201

ETIM



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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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