

**OMNIMATE Data - Trasformatore jack RJ45
RJ45M R1V 3.3N4YG/YG TY****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 16

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Germany

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www.weidmueller.com



Le prese trasmettitore RJ45 (magnetiche) per applicazioni gigabit (1000 a base T) con compensazione integrata controbilanciano attivamente i giunti induttivi e capacitivi e permettono di risparmiare spazio sul circuito stampato.

- Processi di saldatura THT o THR
- Ampia gamma di forme diverse, anche con LED integrati e linguette per contatto schermato
- Versione con imballaggio in vassoio (TY) o su rotolo (Tape-on-Reel, RL)
- Campo di temperatura ampliato da -40°C a +85°C
- Lato dorato rinforzato per una migliore protezione dalla corrosione
- Velocità di trasmissione fino a 1 Gbit/s

Dati generali per l'ordinazione

Tipo	RJ45M R1V 3.3N4YG/YG TY
Nr.Cat.	1534750000
Versione	Connettore per circuito stampato, Trasformatore jack RJ45, 10/100 MBit/s, Collegamento a saldare THT/THR, 180°, Linguette di schermatura: nessuno, 30-80 µ" Ni / 30-µ" Au, LED: Sì, Verde/giallo, Verde/giallo, Numero di poli: 8, Vassoio (montaggio manuale)
GTIN (EAN)	4050118338416
CPZ	120 Pezzo
Imballaggio	Vassoio (montaggio manuale)

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Dati tecnici**Dimensioni e peso**

Larghezza	16 mm	Larghezza (pollici)	0,63 inch
Posizione verticale	20,3 mm	Altezza (pollici)	0,799 inch
Altezza minima	17 mm	Profondità	16,8 mm
Profondità (pollici)	0,661 inch	Peso netto	4,208 g

Temperature

Temperatura d'esercizio , max.	85 °C	Temperatura d'esercizio , min.	-40 °C
Temperatura di magazzinaggio, max.	85 °C	Temperatura di magazzinaggio, min.	-40 °C

Conformità ambientale del prodotto

REACH SVHC	Lead 7439-92-1
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Caratteristiche elettriche

Corrente nominale	1,5 A	Resistenza contro l'isolamento	> 500 MΩ
Rigidità dielettrica contatto-contatto	1000 V DC	Rigidità dielettrica contatto-schermo	1500 V DC
Tensione nominale	125 V AC		

Specifiche di sistema

Angolo di uscita	180°	Cablaggio	8 poli
Cicli di inserimento	750	Colore del LED destro	Verde/giallo
Colore del LED sinistro	Verde/giallo	Diametro foro di equipaggiamento (D)	0,9 mm
Dimensioni del codolo a saldare	0,40 x 0,30 mm, Pin LED = 0,50 x 0,50 mm	Famiglia prodotti	OMNIMATE Data - Trasformatore jack RJ45
Grado di protezione	IP20	LED	Sì
Linguette di schermatura	nessuno	Lunghezza spina a saldare (l)	3,2 mm
Materiale della schermatura	Ottone	Montaggio su circuito stampato	Collegamento a saldare THT/THR
Numero di codoli a saldare per polo	1	Numero di poli	8
Passo in mm (P)	1,27 mm	Passo in pollici (P)	0,05 inch
Schermatura	Sì	Superficie di schermatura	nichelato
Tipo di collegamento	Femmina	Tolleranza diametro di equipaggiamento (D)	± 0,1 mm
Velocità di trasmissione	10/100 MBit/s		

Dati del materiale

Materiale isolante	PA 9T	Colori	Nero
Tabella dei colori (simile)	RAL 9011	Gruppo materiali isolanti	II
CTI	≥ 500	Resistenza contro l'isolamento	> 500 MΩ
Moisture Level (MSL)	1	Classe d'infiammabilità UL 94	V-0
Materiale base dei contatti	Fosforo bronzo	Superficie dei contatti	Oro su nichel
Struttura a strati del connettore maschio	30-80 μ" Ni / 30- μ" Au	Temperatura di magazzinaggio, min.	-40 °C
Temperatura di magazzinaggio, max.	85 °C	Temperatura d'esercizio , min.	-40 °C
Temperatura d'esercizio , max.	85 °C		

Imballaggio

Imballaggio	Vassoio (montaggio manuale)	Lunghezza VPE	25 mm
Larghezza VPE	175 mm	Altezza VPE	305 mm

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Dati tecnici**Classificazioni**

ETIM 6.0	EC002637	eClass 6.2	27-25-05-04
eClass 7.1	27-25-05-04	eClass 8.1	19-17-01-25
eClass 9.0	27-44-04-02	eClass 9.1	27-44-04-02

Approvazioni

Omologazioni



ROHS

Conforme

Downloads

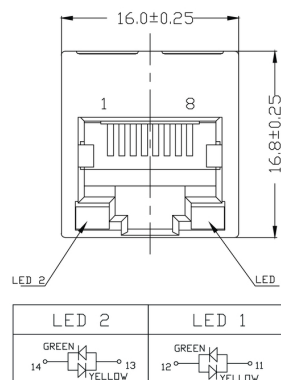
Brochure/Catalogo	MB FREECONTACT EN FL FIELDWIRING EN PI PROFINET CABLING EN
Dati ingegneristici	STEP
Documentazione utente	MAN IE GUIDE DE MAN IE GUIDE EN

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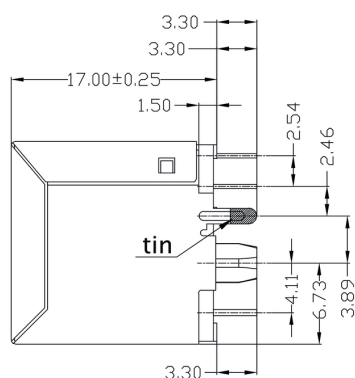
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Disegni

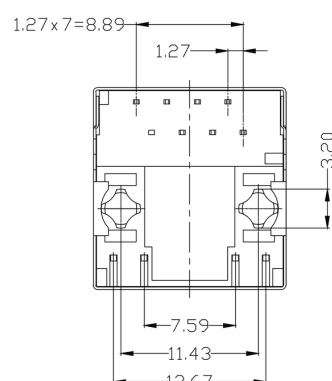
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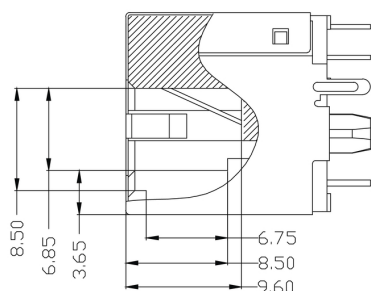
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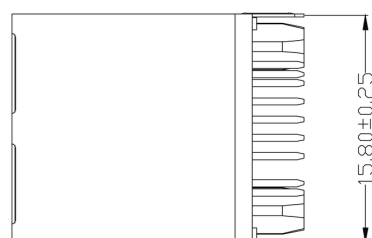
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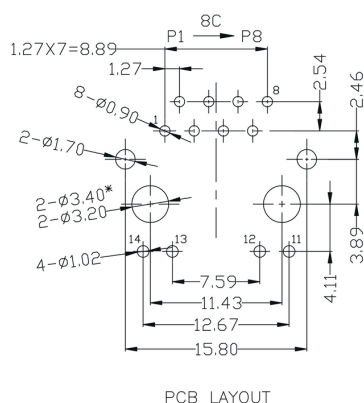


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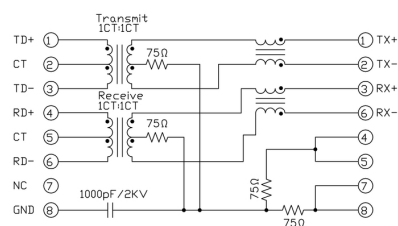
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Disegni

Disegno del circuito stampato



Schema elettrico



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Disegni

Schematic

Characteristics

Inductance	350 µH min. @ 100 kHz, 100 mV, 8 mA DC Bias
Leakage Inductance	0.3 µH max. @ 100 kHz, 100 mV
Insertion Loss	1.1 dB max. @ (1 - 100) MHz
Return Loss	18 dB min. @ (1 - 30) MHz 16 dB min. @ (30 - 60) MHz 12 dB min. @ (60 - 80) MHz
Cross Talk	30 dB min. @ (1 - 100) MHz
Common Mode Rejection	30 dB min. @ (1 - 100) MHz

Type codes

RJ45	G1	R	1	U	3.2	E	4	GY/GY	TY	RJ45G1 R1U 3.2E4GY/GY TY																																																																																																																		
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Recommended wave soldering profiles

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Single Wave:



Double Wave:



Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.

We reserve the right to make technical changes.

Recommended reflow soldering profile

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Reflow soldering profile

The perfect soldering profile for SMT Surface Mount Technology is one the most exiting question in SMT production. But there are more than one correct answer: The diagram of temperature-on-time is related to processing features of solder paste and to maximum load of components.

We have to consider the following parameters:

- Time for pre heating
- Maximum temperature
- Time above melting point
- Time for cooling
- Maximum heating rate
- Maximum cooling rate

We recommend a typical solder profile with associated process limits. With preheating components and board are prepared smoothly for the solder phase. Heating rate is typically $\leq +3\text{K/s}$. In parallel the solder paste is 'activated'. The time above melting point of 217°C the paste gets liquid and components and boards begin to connect. The maximum temperature of 245°C to 254°C should stay between 10 and 40 seconds. In the cooling phase at $\geq -6\text{K/s}$ solder is cured. Board and components cool down while avoiding cold cracks.