

OMNIMATE-data - RJ45-uttag omvandlare RJ45M R1V 1.9N4YG/YG RL

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com



RJ45-sändarhylsor (magnetiska) för gigabit-ändamål (1000 base-T) med integrerad kompensering motverkar aktivt induktiva och kapacitiva kopplingar och gör att utrymme kan sparas på kretskortet.

- Lödningsprocess THT eller THR
- Brett utbud av olika designtyper, även med inbyggda lysdioder och skärmade kontaktflikar
- Förpackad antingen på bricka (TY) eller antistatiskt på tape-on-reel (RL)
- Utvidgat temperaturområde, -40 °C till +85 °C
- Förstärkt guldager för förbättrat korrosionsskydd
- Överföringshastighet upp till 1 Gbit/sek

Allmänna beställningsdata

Typ	RJ45M R1V 1.9N4YG/YG RL
Art.nr.	2562150000
Artikelbeteckning	Kretskortsstickanslutning, RJ45-uttag omvandlare, 10/100 MBit/s , THT/THR lödanslutning, 180°, Skärmflikar: ingen, 30-80 µ" Ni / 30- µ" Au , LED: Ja, grön/gul, grön/gul, Antal poler: 8, Tape
GTIN (EAN)	4050118570380
Frp	200 Stück
Förpackning	Tape

**OMNIMATE-data - RJ45-uttag omvandlare
RJ45M R1V 1.9N4YG/YG RL**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Tekniska data**Mått och vikter**

Bredd	16 mm	Byggbredd (tum)	0,63 inch
Höjd	18,9 mm	Bygghöjd (tum)	0,744 inch
Höjd lägstbyggande	17 mm	Djup	16,8 mm
Byggdjup (tum)	0,661 inch	Nettovikt	6,8 g

Temperaturer

Drifttemperatur, max	85 °C	Drifttemperatur, min.	-40 °C
Lagertemperatur, max.	85 °C	Lagertemperatur, min.	-40 °C

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
------------	----------------

Systemparametrar

Anslutningstyp	Hylsa	Anslutningsvinkel	180°
Antal lödstift per pol	1	Antal poler	8
Avskärmning	Ja	Delning i mm (P)	1,27 mm
Delning i tum (P)	0,05 inch	Färg på höger LED	grön/gul
Färg på vänster LED	grön/gul	LED	Ja
Montering på kretskortet	THT/THR lödanslutning	Produktfamilj	OMNIMATE-data - RJ45-uttag omvandlare
Skärmmaterial	Mässing	Skyddsklass	IP20
Skärmarea	förnicklad	Skärmflikar	ingen
Stickcykler	750	Överföringshastighet	10/100 MBit/s

Elektriska egenskaper

Isolationshållfasthet	> 500 MΩ	Märkström	1,5 A
Märkspänning	125 V AC	Spänningstålighet kontakt/kontakt	1000 V DC
Spänningstålighet kontakt/skärm	1 500 V DC		

Packaging

Förpackning	Tape	VPE-längd	350 mm
VPE-bredd	350 mm	VPE-höjd	120 mm
Tape reel diameter \varnothing (A)	330 mm	Surface resistance	$R_s = 10^9 - 10^{12} \Omega$

Materialdata

Isoleringsmaterial	PA 9T	Färgkod	svart
Färgtabell (jämförbar)	RAL 9011	Isoleringsmaterialgrupp	II
CTI	≥ 500	Isolationshållfasthet	> 500 MΩ
Moisture Level (MSL)	1	Brännbarhetsklass enligt UL 94	V-0
Kontaktgrundmaterial	Fosforbrons	Kontakttyta	Guld över nickel
Skiktstruktur för stiftkontakten	30-80 μ " Ni / 30- μ " Au	Lagertemperatur, min.	-40 °C
Lagertemperatur, max.	85 °C	Drifttemperatur, min.	-40 °C
Drifttemperatur, max	85 °C		

Klassificeringar

ETIM 6.0	EC002637	eClass 6.2	27-25-05-04
eClass 9.0	27-44-04-02	eClass 9.1	27-44-04-02

Skapandedatum den 8 juli 2019 17:36:06 CEST

Datablad

**OMNIMATE-data - RJ45-uttag omvandlare
RJ45M R1V 1.9N4YG/YG RL**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Tekniska data

Godkännanden

Godkännanden



ROHS

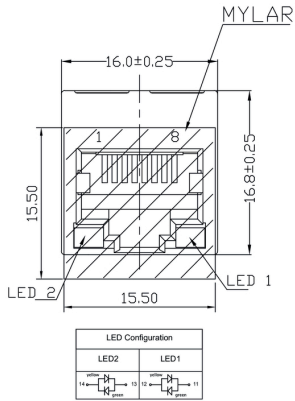
Uppfyllelse

**OMNIMATE-data - RJ45-uttag omvandlare
RJ45M R1V 1.9N4YG/YG RL**

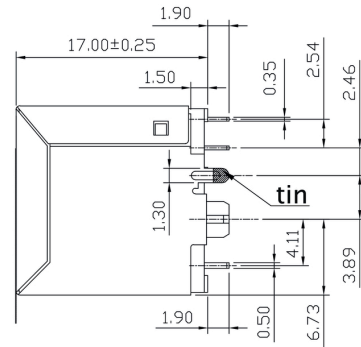
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Ritningar

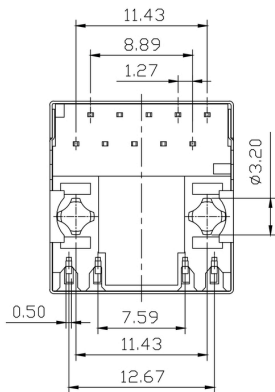
Profilritning



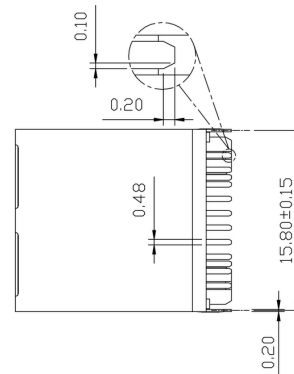
Profilritning



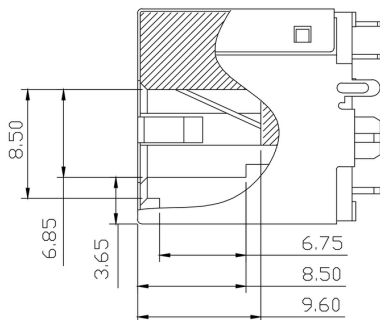
Profilritning



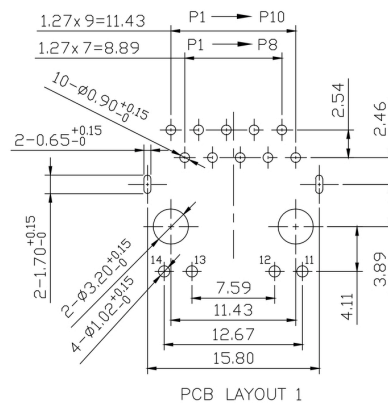
Profilritning



Profilritning



Kretskortsdesign



Datablad

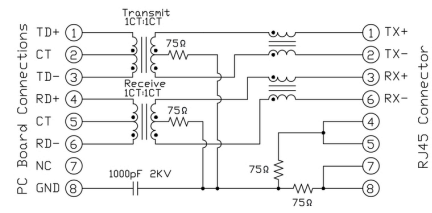
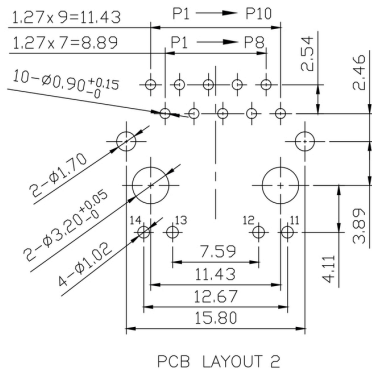
**OMNIMATE-data - RJ45-uttag omvandlare
RJ45M R1V 1.9N4YG/YG RL**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Ritningar

Kretskortsdesign

Kopplingsbild



OMNIMATE-data - RJ45-uttag omvandlare RJ45M R1V 1.9N4YG/YG RL

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Ritningar

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

Code	Description	Options
RJ45	Product family	
G1	Performance Category	C5, C6, C6A, C5e, M, G1, G10, U, MP, MP+
R	Assembly on PCB	R, S, T
U	Direction, latch style	U, D, V, Y
3.2	Solder Pin length	3.2, 1.6, D
E	EMI tabs (ground fingers)	E, N
4	Contact surface thickness	4, 1 = 3µ", 2 = 6µ", 3 = 15µ", 4 = 30µ", 5 = 50µ"
GY/GY	LED	Y/G, G/Y, GY/GY, O/G, R/O, ...
TY	Packaging	TY, RL

RJ45G1 R1U 3.2E4GY/GY TY

Recommended wave soldering profiles

Weidmüller Interface GmbH & Co. KG
 Klängenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

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.

Recommended reflow soldering profile

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com



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.