

**OMNIMATE-data - RJ45-uttag omvandlare
RJ45M R1D 3.3N4Y/G TY****Weidmüller Interface GmbH & Co. KG**

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RJ45-sändarlansor (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 design typer, 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 R1D 3.3N4Y/G TY
Art.nr.	2461060000
Artikelbeteckning	Kretskortsstickanslutning, RJ45-uttag omvandlare, 10/100 MBit/s , THT/THR lödanslutning, 90°, Spärralternativ: nedre, Skärmflikar: ingen, 30-80 µ" Ni / 30- µ" Au , LED: Ja, gul, grön, Antal poler: 8, Bricka (manuell montering)
GTIN (EAN)	4050118476439
Frp	120 Stück
Förpackning	Bricka (manuell montering)

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Tekniska data**Mått och vikter**

Bredd	15,9 mm	Byggbredd (tum)	0,626 inch
Höjd	16,8 mm	Bygghöjd (tum)	0,661 inch
Höjd lägstbyggnad	13,5 mm	Djup	21,35 mm
Byggdjup (tum)	0,841 inch	Nettovikt	3,45 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
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Systemparametrar

Anslutningstyp	Hylsa	Anslutningsvinkel	90°
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
Färg på vänster LED	gul	LED	Ja
Montering på kretskortet	THT/THR lödanslutning	Produktfamilj	OMNIMATE-data - RJ45-uttag omvandlare
Skärmmaterial	Mässing	Skyddsklass	IP20
Skärmarea	förnicklad	Skärmflikar	ingen
Spärralternativ	nedre	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	Bricka (manuell montering)	VPE-längd	0 m
VPE-bredd	0 m	VPE-höjd	0 m

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

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Tekniska data

Godkännanden

Godkännanden



ROHS

Uppfyllelse

Downloads

Användardokumentation

[MAN IE GUIDE DE](#)
[MAN IE GUIDE EN](#)

Teknikuppgifter Data

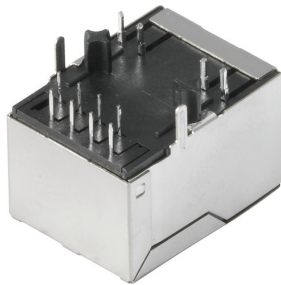
[STEP](#)

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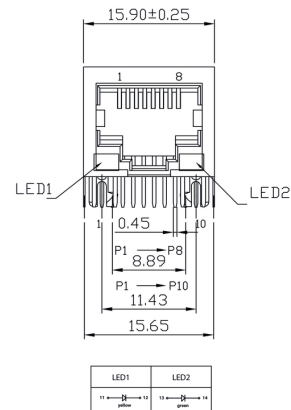
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Ritningar

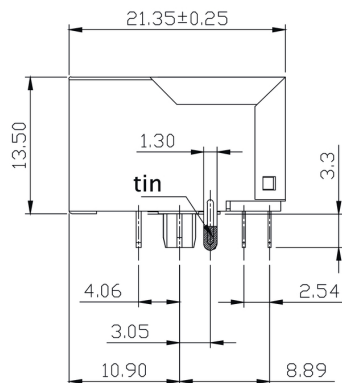
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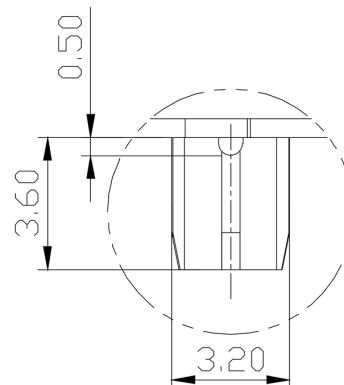
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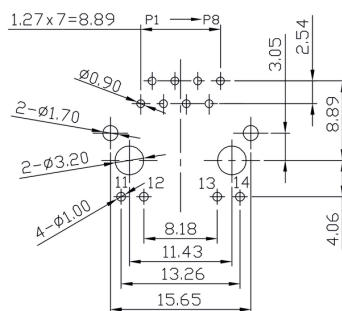
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Profilritning

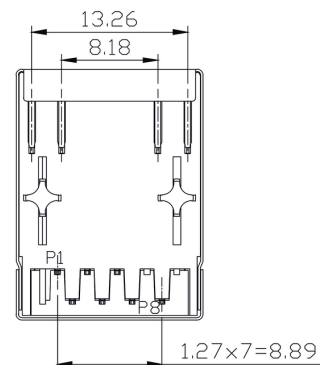


Kretskortsdesign



PCB Layout

Profilritning

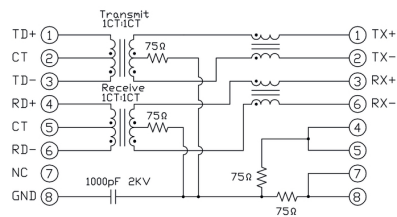


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Ritningar

Kopplingsbild



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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

RJ45	G1	R	1	U	3.2	E	4	GY/GY	TY	RJ45G1 R1U 3.2E4GY/GY TY
										Packaging
										TY
										RL
										Tray in box (manual assembly) Tape on Reel (automated assembly)
										LED
										Y/G
										Green/Yellow (standard)
										G/Y
										Green-Yellow/Green-Yellow
										O/G
										Orange/Green
										R/O
										Red/Orange
										...
										(further combinations possible)
										N
										without LED
										Contact surface thickness
										4
										1 = 3µ", 2 = 6µ", 3 = 15µ", 4 = 30µ", 5 = 50µ"
										EMI tabs (ground fingers)
										E
										E = with EMI tabs
										N
										N = without EMI tabs
										Solder Pin length
										3.2
										3.2 mm
										1.6
										1.6 mm
										D
										SMD
										Direction, latch style
										U
										Horizontal (90°, side entry), latch up
										D
										Horizontal (90°, side entry), latch down
										V
										Vertical (180°, top entry)
										Y
										Diagonal (45°), latch up
										Number of Ports
										1
										1 Port
										12; 14; ...
										multi ports side by side, Multiport
										2; 4; ...
										multi ports about each other, Multilevel
										Assembly on PCB
										R
										Through Hole Reflow - THR
										Soldering process: Wave or Reflow soldering
										S
										Surface Mount Technology - SMT
										T
										Soldering process: Reflow soldering
										Through Hole Technology - THT
										Soldering process: Wave
										Performance Category
										C5
										Category 5
										C6
										Category 6
										C6A
										Category 6A
										C5e
										Category 5e
										M
										10/100 Mbit
										G1
										10/100/1000 Mbit
										G10
										10 Gbit
										U
										Unshielded
										MP
										10/100 Mbit with POE
										MP+
										10/100 Mbit with POE+

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.