

**Données OMNIMATE - Transformateur Prises RJ45
RJ45G1 R12D 3.3E4G/Y TY**

Weidmüller Interface GmbH & Co. KG
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Les connecteurs d'émetteur RJ45 (magnétique) pour applications gigabit (1000 base-T) avec compensation intégrée compensent activement les couplages inductifs et capacitifs et gagne de la place sur le circuit imprimé.

- Systèmes de soudure THT ou THR
- Large gamme de formes, également avec des LED intégrées et des languettes de contact blindage
- Version emballée sur plateau (TY) ou en rouleau (Tape-on-Reel, RL)
- Plage de température étendue de -40 °C à +85 °C
- Couche d'or renforcée pour une protection contre la corrosion améliorée
- Vitesses de transmission jusqu'à 1 Gbit/s

Informations générales de commande

Type	RJ45G1 R12D 3.3E4G/Y TY
Référence	2544500000
Version	Connecteur pour circuit imprimé, Transformateur prises RJ45, 1000 Mbit/s , Raccordement soudé THT/THR, 90°, Option de verrouillage: bas, Languettes de blindage: 6 tabs, 30-80 µ" Ni / 30-µ" Au , LED: Oui, vert, jaune, Nombre de pôles: 10, Tablette (assemblage à la main)
GTIN (EAN)	4050118554267
Cdt.	80 pièce(s)
Emballage	Tablette (assemblage à la main)

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Caractéristiques techniques**Dimensions et poids**

Largeur	31,2 mm	Largeur (pouces)	1,228 inch
Hauteur	16,9 mm	Hauteur (pouces)	0,665 inch
Hauteur version la plus basse	13,6 mm	Profondeur	21,5 mm
Profondeur (pouces)	0,846 inch	Poids net	7 g

Températures

Température de fonctionnement , max.	85 °C	Température de fonctionnement , min.	-40 °C
Température de stockage, max.	85 °C	Température de stockage, min.	-40 °C

Conformité environnementale du produit

REACH SVHC	Lead 7439-92-1
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Caractéristiques du système

Angle de sortie	90°	Blindage	Oui
Couleur LED droite	jaune	Couleur LED gauche	vert
Cycles d'enchâssage	750	Degré de protection	IP20
Famille de produits	Données OMNIMATE - Transformateur Prises RJ45	LED	
Languettes de blindage	6 tabs		Oui
Montage sur le circuit imprimé	Raccordement soudé THT/ THR	Matériau de blindage	Laiton
Nombre de pôles	10	Nombre de picots par pôle	1
Pas en mm (P)	1,27 mm	Option de verrouillage	bas
Surface de blindage	nickelé	Pas en pouces (P)	0,05 inch
Vitesse de transmission	1000 Mbit/s	Type de raccordement	Femelle

Propriétés électriques

Courant nominal	0,80 A	Rigidité diélectrique, contact - blindage	1500 V DC
Rigidité diélectrique, contact - contact	≥ 1000 V DC	Tension nominale	30 V DC
Tenue d'isolation	> 500 MΩ		

Données des matériaux

Matériau isolant	PA 9T	Couleur	noir
Tableau des couleurs (similaire)	RAL 9011	Groupe de matériaux isolants	II
CTI	≥ 500	Tenue d'isolation	> 500 MΩ
Moisture Level (MSL)	1	Classe d'inflammabilité selon UL 94	V-0
Matériau de base du contact	Bronze phosphoreux	Surface du contact	Or sur nickel
Structure en couches du contact mâle	30-80 µ" Ni / 30- µ" Au	Température de stockage, min.	-40 °C
Température de stockage, max.	85 °C	Température de fonctionnement , min.	-40 °C
Température de fonctionnement , max.	85 °C		

Emballage

Emballage	Tablette (assemblage à la main)	Longueur VPE	0 m
Largeur VPE	0 m	Hauteur VPE	0 m

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Caractéristiques techniques**Classifications**

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

Agréments

Agréments



ROHS	Conforme
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Téléchargements

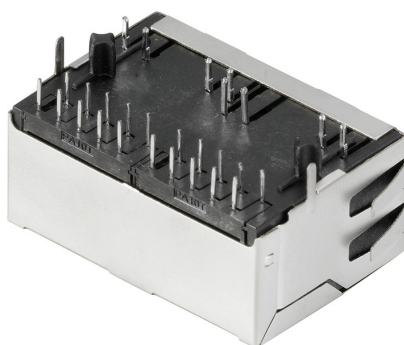
Données techniques	STEP
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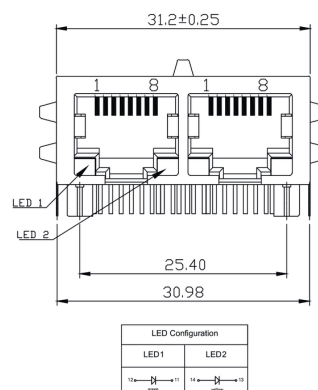
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Dessins

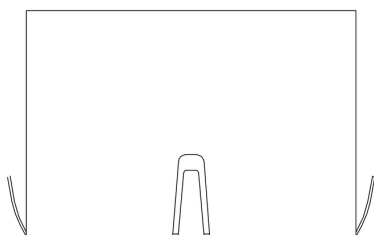
Dessin coté



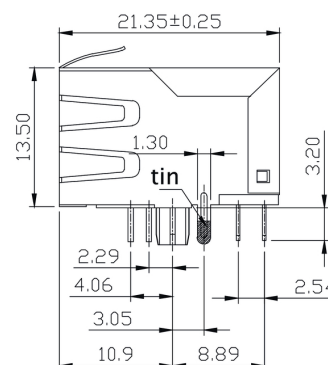
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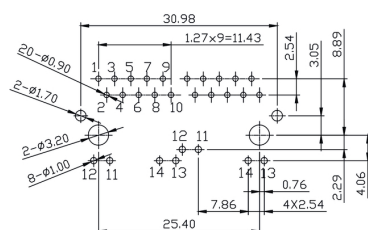
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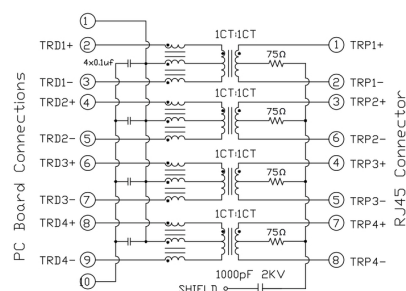
Dessin coté



Conception de la plaque de circuit imprimé



Schéma



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Dessins**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.