

**Données OMNIMATE - Transformateur Prises RJ45
RJ45G1 R1D 3.3E4G/Y TY**

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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 R1D 3.3E4G/Y TY
Référence	2544510000
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)	4050118554168
Cdt.	120 pièce(s)
Emballage	Tablette (assemblage à la main)

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Caractéristiques techniques

Dimensions et poids

Largeur	15,9 mm	Largeur (pouces)	0,626 inch
Hauteur	16,8 mm	Hauteur (pouces)	0,661 inch
Hauteur version la plus basse	13,5 mm	Profondeur	21,35 mm
Profondeur (pouces)	0,841 inch	Poids net	4,002 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'enfichage	750	Degré de protection	IP20
Famille de produits	Données OMNIMATE - Transformateur Prises RJ45	LED	
Languettes de blindage	6 tabs		Oui
Matériau de blindage	Laiton	Longueur du picot à souder (l)	3,3 mm
Nombre de picots par pôle	1	Montage sur le circuit imprimé	Raccordement soudé THT/THR
Option de verrouillage	bas	Nombre de pôles	10
Pas en pouces (P)	0,05 inch	Pas en mm (P)	1,27 mm
Type de raccordement	Femelle	Surface de blindage	nickelé
		Vitesse de transmission	1000 Mbit/s

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

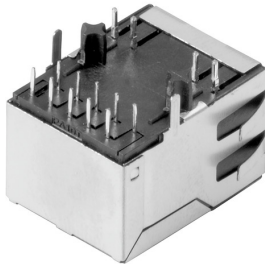
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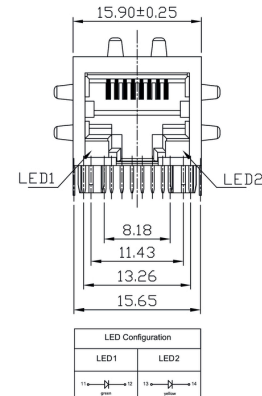
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Dessins

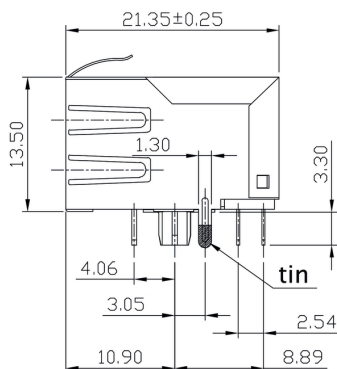
Dessin coté



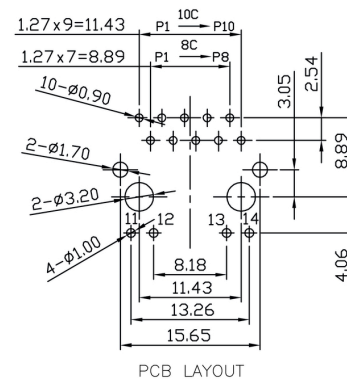
Dessin coté



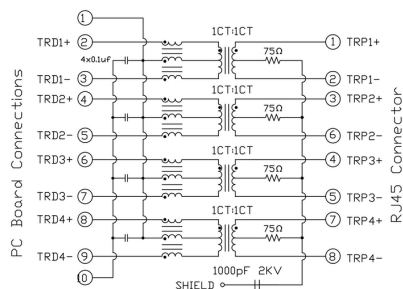
Dessin coté



Conception de la plaque de circuit imprimé



Conception de la plaque de circuit imprimé



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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

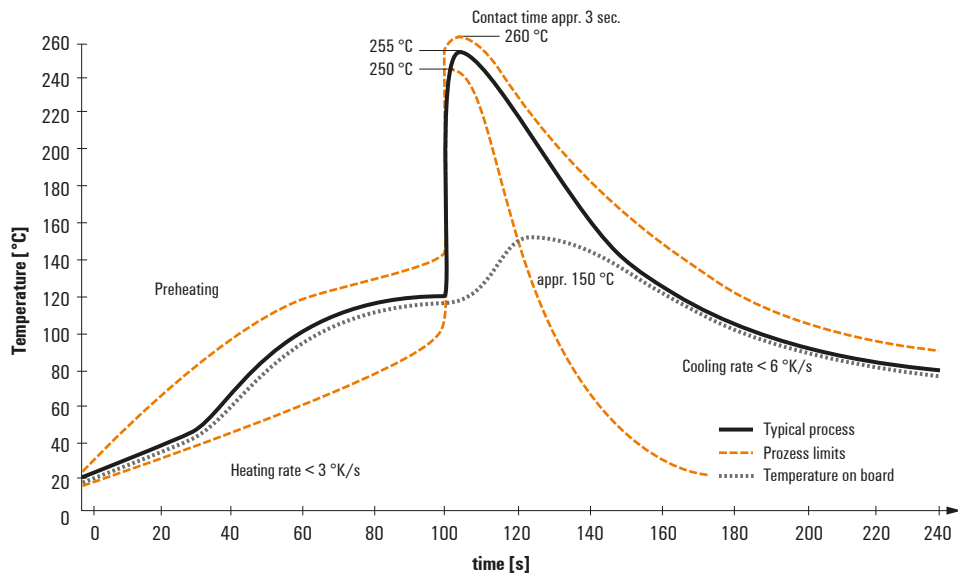
Type codes

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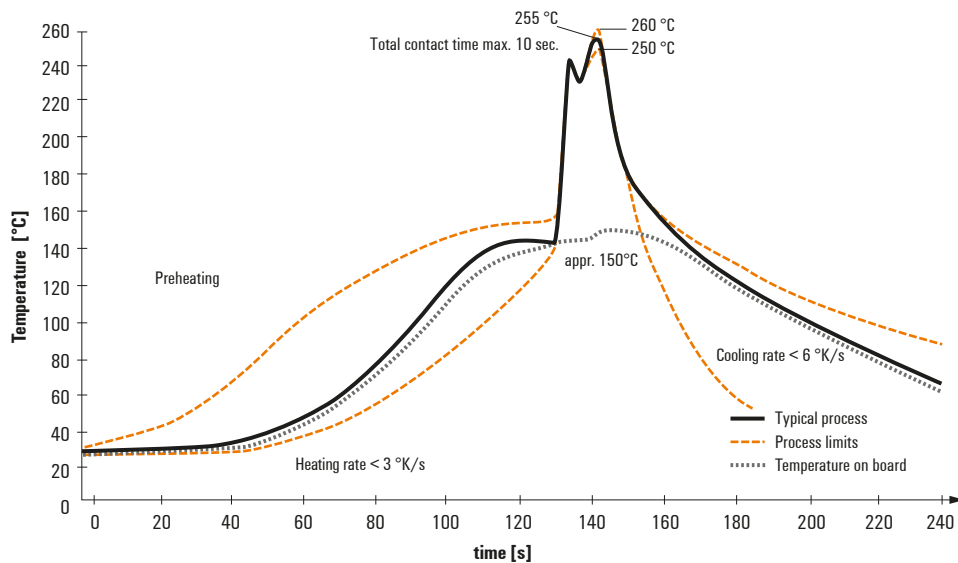
Recommended wave soldering profiles

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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:

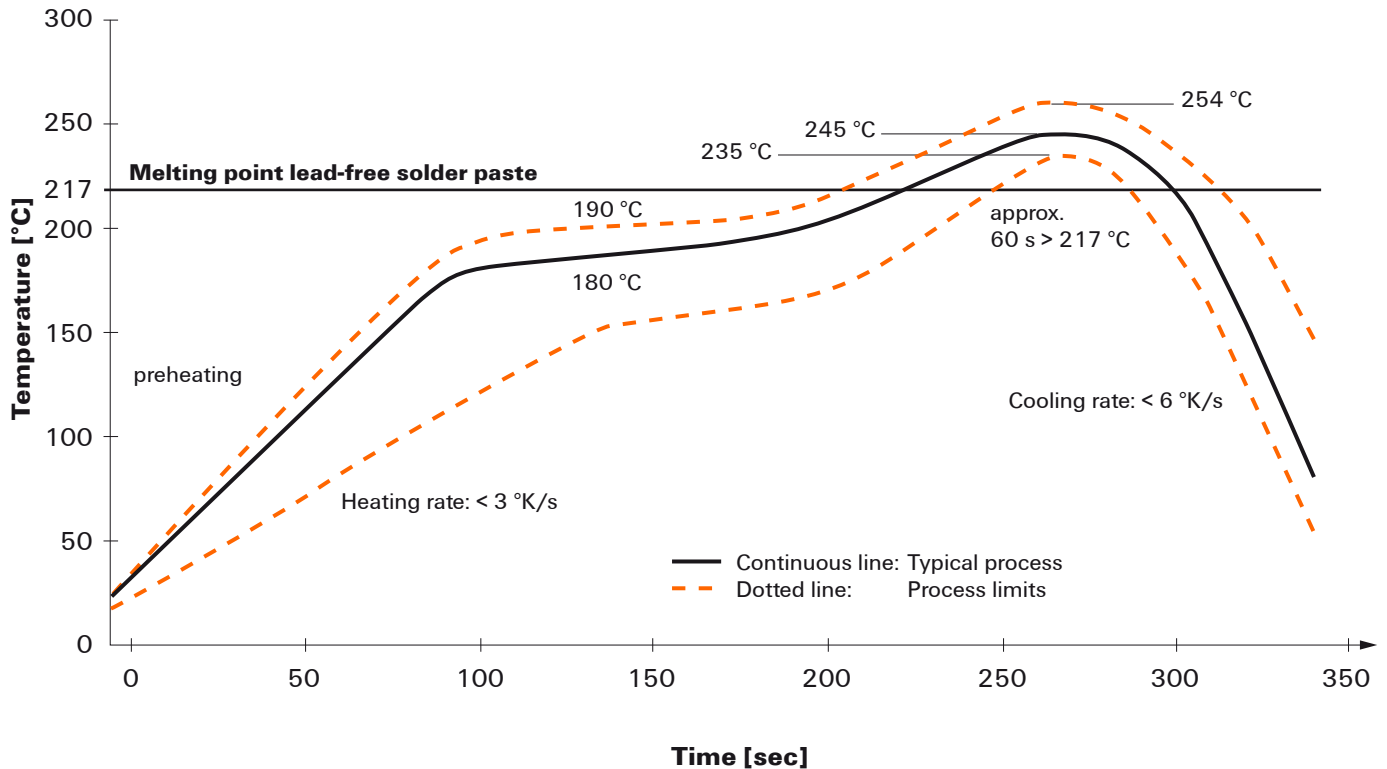
- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

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.