

Datos OMNIMATE - Transformador de conectores RJ45 RJ45M R1D 3.3N4Y/G TY

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Conectores hembra de transmisores RJ45 (magnéticos) para aplicaciones de gigabit (1000 base-T) con compensación integrada contrarrestan activamente acoplamientos inductivos y capacitivos y ahorran espacio en el PCB.

- Procedimientos de soldadura THT o THR
- Amplia gama de diferentes tipos de diseño, también con LED integrados y lengüetas de contacto de apantallado
- Embalaje en bandeja (TY) o en rollo (embalaje en cinta, RL)
- Rango de temperaturas ampliado de -40 °C a +85 °C
- Capa de oro reforzada para protección mejorada contra la corrosión
- Velocidades de transmisión de hasta 1 Gbit/s

Datos generales para pedido

Tipo	RJ45M R1D 3.3N4Y/G TY
Código	2461060000
Versión	Conector para placa c.i., Transformador de conectores RJ45, 10/100 MBit/s, Conexión por soldadura THT/THR, 90°, Opción de bloqueo: inferior, Anilla de apantallado: ninguno, 30-80 µ" Ni / 30-µ" Au, LED: Sí, amarillo, verde, Número de polos: 8, Bandeja (conjunto manual)
GTIN (EAN)	4050118476439
U.E.	120 Pieza
Embalaje	Bandeja (conjunto manual)

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Datos técnicos

Dimensiones y pesos

Anchura	15,9 mm	Anchura (pulgadas)	0,626 inch
Altura	16,8 mm	Altura (pulgadas)	0,661 inch
Altura construcción baja	13,5 mm	Profundidad	21,35 mm
Profundidad (pulgadas)	0,841 inch	Peso neto	3,45 g

Temperaturas

Temperatura de almacenamiento, max.	85 °C	Temperatura de almacenamiento, min.	-40 °C
Temperatura de servicio, max.	85 °C	Temperatura de servicio, min.	-40 °C

Conformidad medioambiental del producto

REACH SVHC	Lead 7439-92-1
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Especificaciones del sistema

Angulo de salida	90°	Anilla de apantallado	ninguno
Apantallamiento	Sí	Ciclos de enchufado	750
Color de LED derecho	verde	Color de LED izquierdo	amarillo
Familia del producto	Datos OMNIMATE - Transformador de conectores RJ45	LED	Sí
Material del apantallamiento	Latón	Montaje sobre placas c.i.	Conexión por soldadura THT/THR
Número de polos	8	Número de terminales de soldadura por polo	1
Opción de bloqueo	inferior	Paso en mm (P)	1,27 mm
Paso en pulgadas (P)	0,05 inch	Superficie de apantallado	niquelado
Tipo de conexión	Conector hembra	Tipo de protección	IP20
Velocidad de transmisión	10/100 MBit/s		

Propiedades eléctricas

Intensidad nominal	1,5 A	Resistencia a tensiones eléctricas, contacto/apantallado	1500 V DC
Resistencia a tensiones eléctricas, contacto/contacto	1000 V DC	Resistencia de aislamiento	> 500 MΩ
Tensión nominal	125 V AC		

Datos del material

Materiales aislantes	PA 9T	Color	negro
Carta de colores (similar)	RAL 9011	Grupo de materiales aislantes	II
CTI	≥ 500	Resistencia de aislamiento	> 500 MΩ
Moisture Level (MSL)	1	Grado inflamabilidad según UL 94	V-0
Material del contacto	Fósforo, bronce	Superficie de contacto	Oro sobre níquel
Estructura de capas del contacto del conector	30-80 μ" Ni / 30- μ" Au	Temperatura de almacenamiento, min.	-40 °C
Temperatura de almacenamiento, max.	85 °C	Temperatura de servicio, min.	-40 °C
Temperatura de servicio, max.	85 °C		

Embalaje

Embalaje	Bandeja (conjunto manual)	Longitud de VPE	0 m
Anchura VPE	0 m	Altura de VPE	0 m

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Datos técnicos

Clasificaciones

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

Homologaciones en línea

Homologaciones



ROHS Conformidad

Descargas

Datos de ingeniería	STEP
Documentación del usuario	MAN IE GUIDE DE MAN IE GUIDE EN

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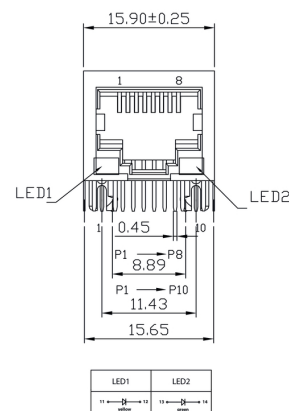
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Dibujos

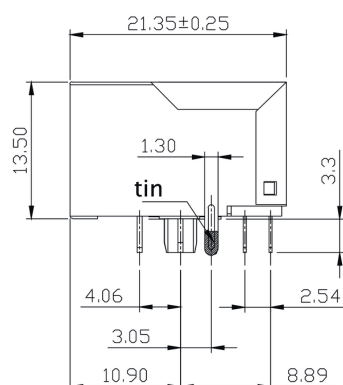
Dibujo acotado



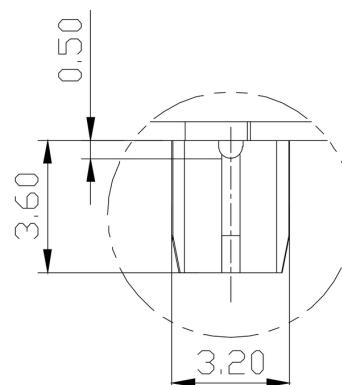
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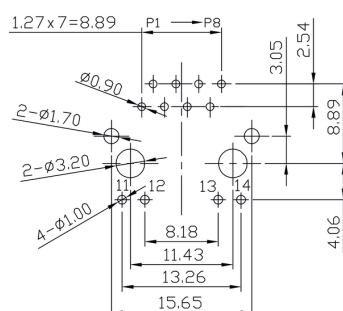
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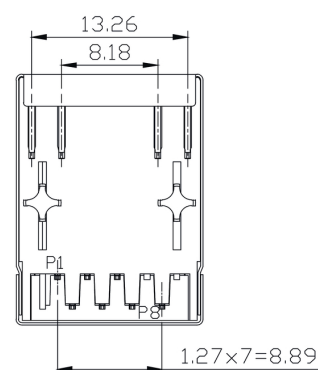


Diseño de la placa de circuito impreso



PCB Layout

Dibujo acotado

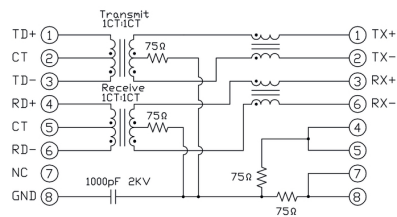


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Esquema de conexiones



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Dibujos

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.