

M12 transf. 1000BASE-T x STR



Part number	21 03 381 2815
Specification	M12 transf. 1000BASE-T x STR
HARTING eCatalogue	https://harting.com/21033812815

Image is for illustration purposes only. Please refer to product description.

Identification

Category	Connectors
Series	Circular connectors M12
Identification	Magnetics
Element	PCB adapter
Specification	with integrated transformer Straight

Version

Termination method	Reflow soldering termination (SMT)
Gender	Female
Shielding	Shielded
Number of contacts	8
Coding	X-coding
Details	Order housings separately
Pack contents	60 pieces in a tray

Technical characteristics

Rated current	0.8 A
Rated voltage	57 V
Rated impulse voltage	1.5 kV
Pollution degree	3
Data rate	1 Gbit/s
Insulation resistance	>10 ⁸ Ω

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HARTING Electronics GmbH | Marienwerderstraße 3 | 32339 Espelkamp | Germany
Phone +49 5772 47-97200 | electronics@HARTING.com | www.HARTING.com



Technical characteristics

Contact resistance	≤10 mΩ
Limiting temperature	-40 +85 °C (during reflow soldering max. +245)
Insertion force	30 N
Withdrawal force	30 N
Mating cycles	≥100
Degree of protection acc. to IEC 60529	IP65 / IP67 mated condition
Isolation group	IIIa (175 ≤ CTI < 400)
Process Sensitivity Level (PSL)	R7 acc. to ECA/IPC/JEDEC J-STD-075

Material properties

Liquid crystal polymer (LCP)
Black
Brass
Au over Ni Mating side
V-0
compliant with exemption
6(c): Copper alloy containing up to 4 % lead by weight
compliant with exemption
50
Not contained
Not contained
Yes
Lead
0d7d3693-d625-47ab-934a-d241bf72c86e
Yes
Lead Nickel
EN 45545-2 (2020-08)
R26

Specifications and approvals

Specifications IEC 61076-2-109

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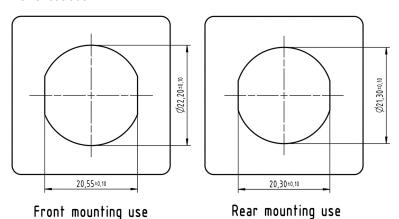
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Commercial data

Packaging size	60
Net weight	12.583 g
Country of origin	China
European customs tariff number	85366990
GTIN	5713140228887
eCl@ss	27460201 PCB connector (board connector)
ETIM	EC002637
UNSPSC 24.0	39121415

Panel cut out



General information

Recommended PCB layout Schematic PCB side D1+ 7 O-1,27 CT1 6 O-Ø2,60±0,05 Non Plated Hole P1- 2 D1- 8 O-P2+ 3 CT2 17 Ø1,55±0.05 Non Plated Hole D2- 2 O-D3+ 4 O-P3+ 7 (T3 3 O-D3- 5 O-P3- 8 D4+ 16 O-CT4 14 O-D4- 15 O-

Component outline

⊕ 0,10 2,1x0,7 1,27

Electrical Characteristics @+25°C unless otherwise noted Meets IEEE802.3 specification

Parameter	Specification/ Limit Values
Operating Temperature	-40°C - +85°C
Turn Ratio (+/- 2%)	1CT : 1CT
OCL	min 350µH @ 100KHz , 100mV with 8mA bias current
Isolation (Input- Output)	2.25kV VDC , for 60sec. min
	f ≤ 100MHz
Insertion Loss	1.3 dB
Return Loss	9 dB
Crosstalk	30 dB
CMRR	30 dB
CDMR	30 dB
NOTE: 1. f is the frequency in MHz 2. The Product has been tested for DC isolation. HARTING	

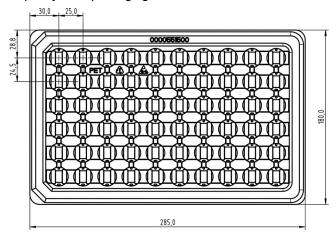
assumes no liability or obligation for AC isolation testing

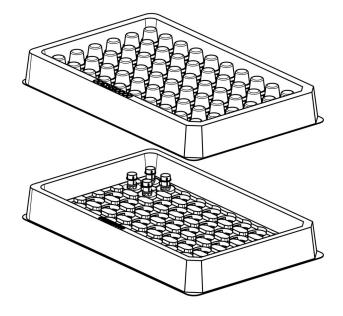
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5,715 8,89 2,54



Tape layout & packaging





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