



Pushing Performance
Since 1945

ix Industrial 10C-12 jack AV (T&R400)



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

Part number	09 45 283 3500
Specification	ix Industrial 10C-12 jack AV (T&R400)
HARTING eCatalogue	https://harting.com/09452833500

Identification

Category	Connectors
Series	HARTING ix Industrial®
Identification	Data
Element	PCB connector
Specification	Angled

Version

Termination method	Solder termination
Shielding	Fully shielded, 360° shielding contact
Number of contacts	8
further contacts	+ 2x GND
Coding	Type C
Pack contents	On a reel

Technical characteristics

Rated current	1.5 A
	3 A
Rated current	1.5 A per contact
	3 A per contact when used with 4 contacts (1,2,6,7)
Rated voltage	50 V AC
	60 V DC
Transmission characteristics	Cat. 6A Class E _A up to 500 MHz



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Technical characteristics

Data rate	10 Mbit/s
	100 Mbit/s
	1 Gbit/s
	2.5 Gbit/s
	5 Gbit/s
	10 Gbit/s
Insulation resistance	>500 MΩ
Contact resistance	≤30 mΩ
Shielding resistance	≤100 mΩ
Limiting temperature	-40 ... +85 °C
Storage temperature	-30 ... +60 °C
Relative humidity	95 % Non-condensing (operation)
	95 % Non-condensing (storage/transport)
Insertion force	≤25 N
Withdrawal force	≤25 N
Mating cycles	≥5,000
Degree of protection acc. to IEC 60529	IP20
Test voltage U _{DC}	0.5 kV (contact-contact)
	2.25 kV (contact-shielding)
Retention force	≥80 N locking
Moisture Sensitivity Level (MSL)	1 acc. to ECA/IPC/JEDEC J-STD-020D
Process Sensitivity Level (PSL)	R0 acc. to ECA/IPC/JEDEC J-STD-020D

Material properties

Material (insert)	Liquid crystal polymer (LCP)
Colour (insert)	Grey
Material (shielding)	Stainless steel
	Sn ≥ 1 µm over Ni ≥ 0.2 µm Mating side (shielding)
Material (contacts)	Copper alloy
Surface (contacts)	Au ≥ 0.2 µm over Ni ≥ 2 µm Mating side
	Au ≥ 0.03 µm over Ni ≥ 2 µm Termination side
Material flammability class acc. to UL 94	V-0
RoHS	compliant
ELV status	compliant
China RoHS	e
REACH Annex XVII substances	Not contained
REACH ANNEX XIV substances	Not contained



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Material properties

REACH SVHC substances	Not contained
California Proposition 65 substances	Not contained
Fire protection on railway vehicles	EN 45545-2 (2020-08) + A1 (2023-10)
Requirement set with Hazard Levels	no requirements (flammable mass < 10g)

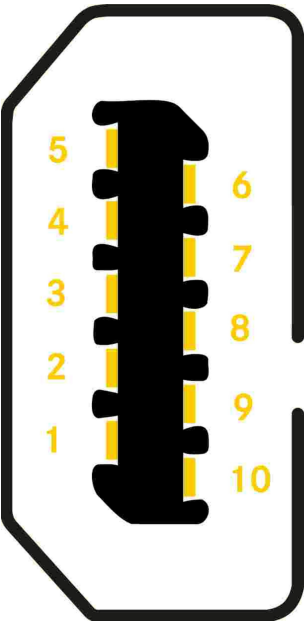
Specifications and approvals

Specifications	IEC 61076-3-124 EN 45545-2
UL / CSA	UL 1977 ECBT2.E102079 CSA-C22.2 No. 182.3 ECBT8.E102079

Commercial data

Packaging size	400
Net weight	3.04 g
Country of origin	Japan
European customs tariff number	85366930
GTIN	5713140324862
eCl@ss	27460201 PCB connector (board connector)
ETIM	EC002637
UNSPSC 24.0	39121415

Contact configuration



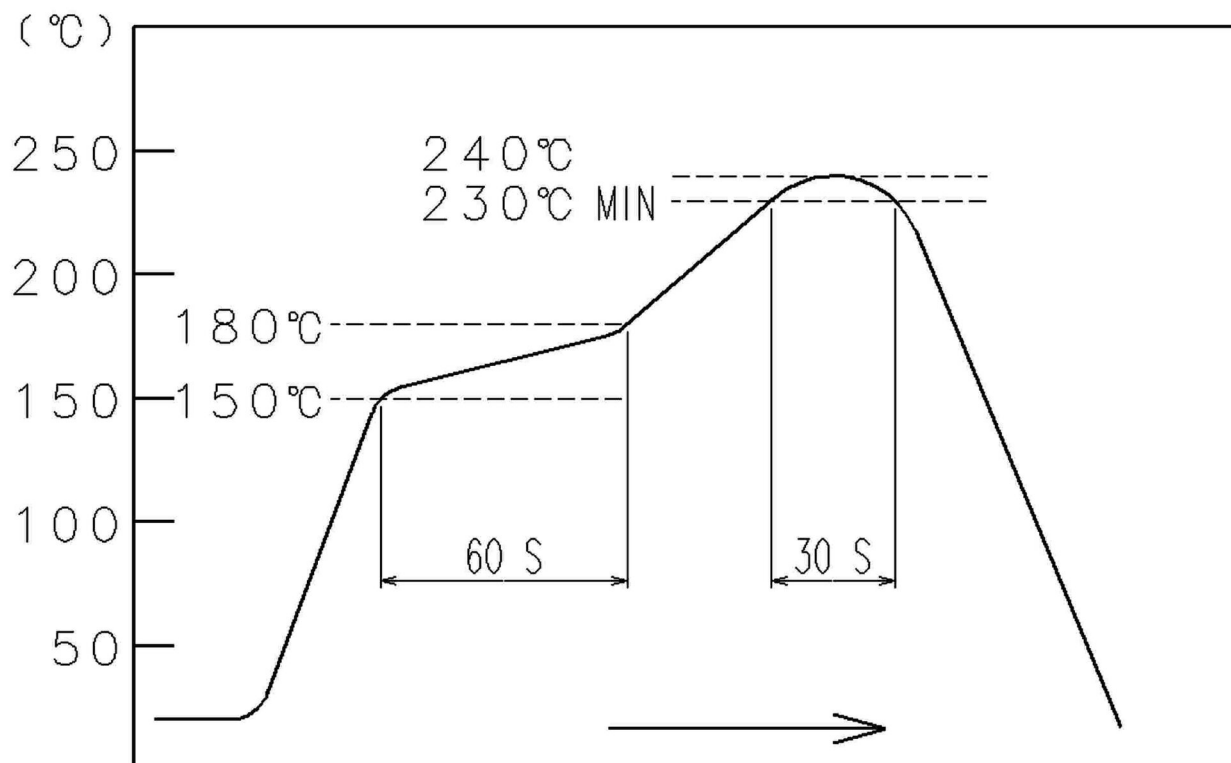
ix Industrial	10/100 Mbit/s	1/10 Gbit/s	TIA	
			568 A	568 B
1	TX+	BI_DA+	White/Green	White/Orange
2	TX-	BI_DA-	Green	Orange
3	N.C	N.C	N.C	N.C
4	N.C	BI_DC+	Blue	Blue
5	N.C	BI_DC-	White/Blue	White/Blue
6	RX+	BI_DB+	White/Orange	White/Green
7	RX-	BI_DB-	Orange	Green
8	N.C	N.C	N.C	N.C
9	N.C	BI_DD+	White/Brown	White/Brown
10	N.C	BI_DD-	Brown	Brown

Environmental specifications

Rapid change of temperature (IEC 60512-11d)	10 cycles between -55°C and 85°C with 30 minutes dwell at temp. extremes and 2 to 3 minutes transition between temperatures
Dry heat (IEC 60512-11i)	+85°C, 500 h
Damp heat, steady state (IEC 60512-11-3)	40°C; relative humidity 93%; 500 h (Test 11c)
Damp heat, cycles (IEC 60068-2-38)	25°C to 65°C; cold sub-cycle: -10°C; relative humidity 93%; 10 cycles, 1 cycle/24h
Cold (IEC 60512-11j)	-55°C, 240h
Flow mixed gas test (IEC 60068-2-60)	4 d, Method 4 (mated and unmated)
Corrosion salt mist	Exposed at 5% salt water, 35°C, 48h (unmated); no heavy corrosion of contacts
Vibration, sinusoidal (IEC 60512-test 6d)	10 to 500 Hz; 0.35 mm, 50 m/s ² , 2h / 3 axis; no contact disturbances ≥ 1µs
Mechanical shock (IEC 60512-test 6d)	half-sine shock 300 m/s ² , 11 ms 3 shocks / both directions / 3 axis - totally 18 shocks no contact disturbances ≥ 1µs
Fretting Corrosion	490 m/s ² , 30 times/min at 1000 times no contact disturbances ≥ 1µs
Wrenching Strength	Applying 25 times / 30N for 1s / in 2 axis on tip of plug case in mated condition no damage, no cracks or looseness of parts

Recommended soldering profile (reflow)

In addition to adhering to the maximum values specified by the relevant MSL (Moisture Sensitivity Level) and PSL (Process Sensitivity Level) classifications, we recommend the following reflow temperature profile as a guideline. Please note that this profile is intended as a general recommendation only. The actual soldering profile must always be adapted to your specific application, the components used, and the type of soldering paste or alloy.



Recommended soldering profile (reflow) – temperature at SMT leads