

MaxiBridge QT

Cable Connector System with Tin Plated Contacts



MaxiBridge QT

CABLE CONNECTOR SYSTEM WITH DEFINED TIN PLATING

GENERAL



MaxiBridge QT (Quantum Tin) is a cable connector system with a 2.54 mm pitch and the logical further development of the MaxiBridge product family. The connectors are available in single and dual row versions. An important distinguishing feature from the MaxiBridge connectors is the tin plated contact surfaces. MaxiBridge QT is predestined for demanding and space-saving board-to-wire applications. The compact cable connector system is characterized by high current carrying capacity and reliability.

The MaxiBridge QT connector system is ideally suited for many automotive applications. For application areas such as battery management systems in vehicles and modern power electronics in electric and hybrid vehicles, high-performance and at the same time safety-oriented connectors are required. The robust and compact design of MaxiBridge QT connec-

tors with their primary and secondary locking of the female contacts in the housing perfectly meets these requirements. Front lighting systems require connectors with specific characteristics such as high thermal load capacity and complement: high current carrying capacity. The MaxiBridge QT connector system fully meets these application requirements.

In addition to the automotive sector, industrial automation offers many other application possibilities. The MaxiBridge QT connectors can be used to network sensors, actuators, and controls, to couple drive controls and drives, or to implement analysis devices and display units.

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FEATURES

Pitch	2.54 mm
No. of Pins	Single row: 2, 3, 4 pins; 5, 6, and 8 pins planned Dual row: 10, 20 pins
Current rating per contact	up to 7 A
Termination	Male SMT, Female crimp
Cable	AWG 20, 22 Metric 0.35 mm ² , 0.5 mm ²
Color coding	black
Packaging	Male Tape and Reel Female poly-bag (no pre-assembly of the female housing)
Variants*	Vertical male connectors, single and dual row Right angle male connectors, single and dual row Female connectors 180° cable outlet, single and dual row Crimp contacts
Product approval	LV214 / USCAR planned

* QT connectors are not mating compatible to MaxiBridge gold plated.

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CHARACTERISTICS

TECHNICAL DATA

Description	Standard	Male Connector Single and Dual Row	Female Connector Single and Dual Row
Temperature range			-40 / 105 °C
Current rating per contact	IEC60512 test 5b		max. 7 A at 20 °C
Air- and creepage			contact - contact 0.4 mm
Operating voltage	IEC 60664		40 V
Dielectric strength	IEC 60512 test 4a		contact – contact 500 V _{rms}
Contact resistant	IEC 60512 test 2a		< 25 mΩ
Insulation resistant	IEC 60512 test 3a		> 10 ⁴ MΩ
Mechanical Operation	IEC 60512 test 9a		20 mating cycles
Insertion and withdrawal force	IEC 60512 test 13b		1 N per contact
Gauge retention force	IEC 60512 test 16e		> 0.1 N
Processing Conditions			
Reflow soldering temperature max.	JEDEC J-STD-020	> 30 s at 260 °C	–
Coplanarity		< 0.1 mm	–
Housing Material			
Insulation body			LCP
CTI value	IEC 112		175
UL flame rating			UL 94 V-0
UL file plastic material			E83005
Contact Material			
Base material			Cu alloy
Mating area			Sn
Termination area			Sn

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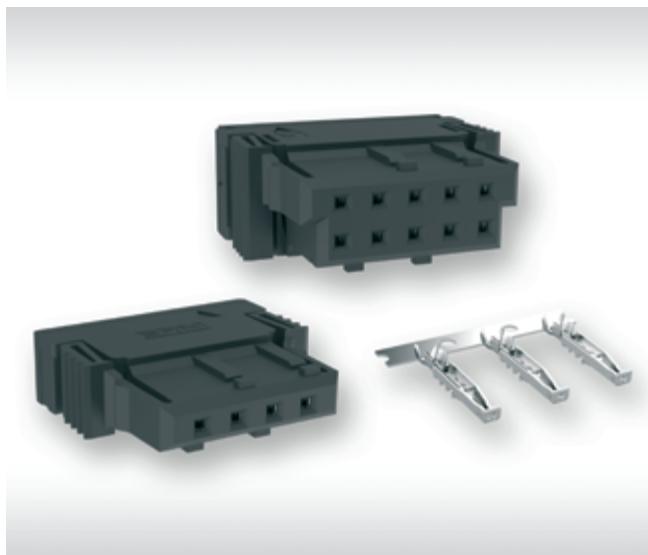
VARIANTS

MALE CONNECTORS



- Vertical and right angle
- 2, 3, 4, 10 and 20 pins
- Single and dual row
- SMT termination
- Tape and Reel packaging
- Available part numbers and current drawings on request

FEMALE CONNECTORS



- 180 ° cable outlet
- 2, 3, 4, 10 and 20 pins
- Single and dual row
- Crimp contacts
- Poly-bag packaging
- Available part numbers and current drawings on request



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