



Special high current and coaxial contacts are designed for use mainly in so called mixed connectors, where those contacts can be loaded by "snap in" means and are used besides an amount of signal contacts dependend on the connector style. Mixed connectors are available in DIN, ERmet and D-Sub styles. Look for the letters MD (Male DIN) / FD (Female DIN) / ME (Male ERmet) / FE (Female ERmet) / TMC M (D-Sub Male) or TMC F (D-Sub Female) on our special contact customer drawing. Those letters are defining the mixed connector in which the special contact can be used.

		High Current Contacts	Coaxial Contacts
Number of Pins		1	1
Technical Data			
Climate category	DIN EN 60068-1 test b	-55/125/56	-55/125/56
Temperature range		-55/125 °C	-55/105 °C
Current rating per contact	IEC60512 test 5b	see drawing of special contact	see drawing of special contact
Contact impedance		-	50 Ω or 75 Ω
Frequency range		-	see drawing of special contact
Clearance and creepage distance		depends on connector housing when used in mixed connectors	
CTI value	IEC 60112	for use in mixed connectors the applicable value of the connector housing material is valid	
Operating voltage	IEC 60664	The permissible operating voltages depends on the customer application and on the applicable or specified safety requirements. Insulation coordination according to IEC 60664-1 has to be regarded for the complete electrical device. Therefore, the maximum creepage and clearance distances of the mated connectors are specified for consideration as a part of the whole current path. In practice, reductions in creepage or clearance distances may occur due to the conductive pattern of the printed board or the wiring used, and have to be taken into account separately. As a result the creepage and clearance distances for the application may be reduced compared to those of the connector.	
Dielectric strength	IEC 60512 test 4a	depends on connector housing when used in mixed connectors	
Contact resistance	IEC 60512 test 2a	<10 mΩ	<10 mΩ (inner conductor) <3 mΩ (outer conductor)
Insulation resistance	IEC 60512 test 3a	depends on connector housing when used in mixed connectors	
Vibration, sine	IEC 60512 test 6d	for use in mixed connectors the applicable value of the connector housing material is valid	
Contact disturbance (during vibration test)	IEC 60512 test 2e	for use in mixed connectors the applicable value of the connector housing material is valid	
Mechanical operation (mating cycles)	IEC 60512 test 9a	Class 1: ≥500 mating cycles	Class 1: ≥500 mating cycles
Insertion and withdrawal force	IEC 60512 test 13b	<10 N / ≥1.6 N	<10 N

	High Current Contacts	Coaxial Contacts
Number of Pins	1	1
Process-conditions		
Solder temperature max.	IEC 68-2-20	
Hand soldering temperature max.	3.5 s at 350 °C	3.5 s at 350 °C
Dip soldering temperature max.	10 s at 260 °C	10 s at 260 °C
Reflow soldering temperature max.	JEDEC J-STD-020D 20 - 40 s at 260 °C	**
Temperature above liquids	JEDEC J-STD-020D 60 - 150 s above 217 °C***	**
Warning	Soldering of pressfit connectors not to be recommended. Please verify on our customer drawing which process is applicable.	
Housing Materials		
Plastic material Symbol		according mixed connector
CTI value	IEC 112	according mixed connector
UL flame rating		according mixed connector
UL file		according mixed connector
Contact Materials		
Base material	Cu alloy	Cu alloy
Mating area*	2-4 µm NiP + 0.15 µm Au over Ni replacing 1.2 µm Au over 2-3 µm Ni and 0.8 µm Au over 2-3 µm Ni	2-4 µm NiP + 0.15 µm Au over Ni replacing 1.2 µm Au over 2-3 µm Ni and 0.8 µm Au over 2-3 µm Ni
Termination area solder, pressfit and THR	gold (Au) or tin (Sn) plated, depending on manufacturing method	gold (Au) or tin (Sn) plated, depending on manufacturing method
Environment compatibility		
Recycling	no flame-retardent additives, no toxic additives allows easy recycling	
RoHS conformity	yes	yes
Product-approval		
UL		according mixed connector
CSA		according mixed connector

* Note: custom special contacts may have different plating causing a lower value of mating cycles!

** Note: Pay attention to the dielectric plastic material of coaxial contacts defined on the customer drawing for verifying leadfree solder capabilities.

*** Liquidus temperature for solder paste SnAgCu