

This specification covers the conditions of use, mechanical and electrical performances of Tyco Electronics 32 way MQS right angle header.

1. DESCRIPTION

Housing : Material : PBT-GF20 or SPS GF20 or PCT-GF30.
Coding : mechanical and visual (colors)
PCB mounting : ears for rivets or screws.
Polarization on the PCB with plastic pin.

Contacts : Dimension : 0,63 x 0,63 mm.
Material : bronze.
Post Plating : tin plated.

2. REFERENCE DOCUMENT

P/N	INTERFACE SPECIFICATION	PCB INTERFACE
X-953486-X	/	See customer drawing

3. CONDITIONS OF USE

- Temperature
 - operating of temperature : - 40°C / + 85°C
 - test temperature : - 40°C / + 100°C
- Nominal voltage : 48V
- Sealing : not applicable.
- Maximum temperature for reflow process : +230°C (part in SPS material);
+250°C (part in PCT material).

4. TEST

Tests are carried according to IEC 60512 series.

TEST	Ref.	TEST CONDITIONS	REQUIREMENTS
GENERAL EXAMINATION			
Visual examination	1a		No defect that would impair normal operation
ELECTRICAL TESTS			
Insulation resistance	3a	Voltage : 100 V Method A : test between one contact and the others	$R_i \geq 50M\Omega$
Dielectric withstanding voltage	4a	Voltage : 1000 V AC during 1 min.	No breakdown or flashover
MECHANICAL TESTS			
Contact retention in the housing	15a	Applied an axial force of 25 N	No damage
Keying on the pcb		Applied force 50 N	Will not fit the PCB
Polarization on the pcb	15c	Applied force 50 N	Will not fit the PCB
OTHERS TESTS			
Mating force (receptacle housing/header)		Apply a force at the end of the lever in the mating direction	$F \leq 80N$
Unmating force (receptacle housing/header)		Apply a force at the end of the lever in the unmating direction	$F \leq 80N$
Force retention receptacle housing/header		Apply an axial force in the separation direction of the two connectors	$F \geq 100N$
Coding of receptacle housing/header		Engage the receptacle housing in the header in every possible way except the right way but with the one of different coding	$F \geq 150N$