

This specification covers the conditions of use, mechanical and electrical performances of AMP 18 way MQS straight header, pitch 3.5 between rows.

1. DESCRIPTION

Housing : Material : 20 % glass reinforced PBT or SPS.
PCB mounting : board locks, or ears for rivets
Polarization on the PCB.

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

2. REFERENCE DOCUMENT

| P/N | Material | Interface specification | PCB Interface | PCB mounting |
|-----------|----------|-------------------------|----------------------|--------------|
| 953466-X | PBT | / | See customer drawing | Board-locks |
| 953871-X | PBT | / | See customer drawing | Ears |
| 1379040-X | SPS | / | See customer drawing | Board-locks |

3. CONDITIONS OF USE

- Temperature : - operating of temperature : - 40°C / + 85°C
- test temperature : - 40°C / + 100°C
- Nominal voltage : 12V
- Sealing : not applicable.
- Maximum temperature for reflow process : +230°C (part in SPS material)

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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 Test | | | |
| 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. A.C. | No breakdown or flashover |
| Mechanical Tests | | | |
| Free fall | Ed | Fall from 1 meter height on hard concrete | No damage |
| Contact retention in the housing | 15a | Applied an axial force of 25 N | No damage |
| Soldering heat test (for PBT headers) | | Heat the connector at 160° C for 3 min | No visible damage |
| Mounting header on the pcb (header with board-locks) | | Applied an axial force | $F \leq 70$ N (PBT) $F \leq 50$ N (SPS) |
| Retention header on the pcb (header with board-locks) | | Applied an axial force | $F \geq 20$ N |
| Polarization on the pcb | 13c | Applied force 50 N | Will not fit the PCB |