

This specification defines the technical characteristics and performances of the 2 way MPQ + 3 way MQS socket housing .

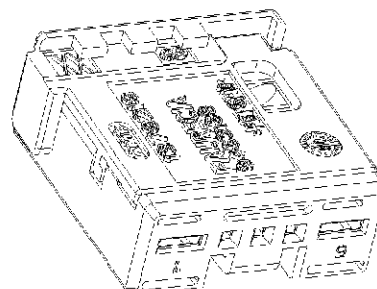
## 1. PRODUCT

### 1.1. Description

#### 1.1.1. Reference

- 2 way MPQ + 3 way MQS socket housing : 1379217-X
- Cover for the 2 way MPQ + 3 way MQS socket hsg : 1379218-X

The dash defines the variants of color.



#### 1.1.2. Material

PBT reinforced glass fiber of 10%, for all the components.

## 1.2. Functions

### 1.2.1. Polarization

Two polarizations :

- Between contact and socket housing.
- Between socket housing + cover and counter-part.

### 1.2.2. Double-locking

Two levels of locking :

- Contact/cavity : The first locking is made by the cage lance of the contact.
- Cover/socket hsg : The second locking is made by the plastic click of cover on the socket hsg.

## 1.3. Contacts

- Micro Power Quadlock receptacle crimp version : 968075-2 (pre-tinned)
- Micro Quadlock System receptacle crimp version : 144969-1 (pre-tinned)

## 1.4. Wires

Type	Section (mm2)	Ø Insulation (mm)
MQS	0.35	1.28 mini – 1.40 maxi
MPQ	1.50	2.10 mini – 2.25 maxi

Rédigé par : T. N'GUYEN

Date : 24 August 2001

Approuvé par : J.J. REVIL

Date : 26 October 2001

## 2. OPERATION CONDITIONS

### 2.1. Temperatures

Class	Operating temperature	Test temperature
T2	-40°+ 100°C	125°C

### 2.2. Class of vibration : Class 1.

### 2.3. Sealing : Class 0 ( no sealed).

### 2.4. Nominal voltage : ≤ 16 V.

## 3. TESTS

Tests are carried according to IEC 60512.

GENERAL EXAMINATION		
TESTS	MODALITIES	SANCTION
VISUAL EXAMINATION	Visual examination	No defects that would impair normal operation.
ELECTRICAL TESTS		
TESTS	TEST PROCEDURES	REQUIREMENTS
INSULATION RESISTANCE	Test Voltage : 100 V	$R_i \geq 100 \text{ M}\Omega$
DIELECTRIC RIGIDITY	Test Voltage : 1000Vac, between each way. During 1 min.	No arc No breakdown
MECHANICAL TESTS		
TESTS	TEST PROCEDURES	REQUIREMENTS
INSERTION FORCE OF THE CONTACT INTO THE CAVITY	Insertion by hand . (Double –locking passive device)	MQS : $F \leq 8 \text{ N}$ MPQ : $F \leq 20 \text{ N}$
RETENTION FORCE OF THE CONTACT INTO THE CAVITY	Double –locking passive device	MQS : $F \geq 40 \text{ N}$ MPQ : $F \geq 60 \text{ N}$
	Double –locking active device	MQS : $F \geq 60 \text{ N}$ MPQ : $F \geq 100 \text{ N}$
POLARIZATION CONTACT/ CAVITY	Try to insert the contact into the cavity differently of the normal way .	MQS : $F \geq 50 \text{ N}$ MPQ : $F \geq 80 \text{ N}$
INSERTION FORCE OF THE CONNECTOR	Apply a force in the mating direction	$10 \text{ N} \leq F \leq 50 \text{ N}$
EXTRACTION FORCE OF CONNECTOR	Apply a force in the un-mating direction	$10 \text{ N} \leq F \leq 80 \text{ N}$
POLARIZATION OF CONNECTOR	Attempt to engage the connector into the header upside down.	$F \geq 150 \text{ N}$
DROP	Drop from 1m on concrete floor (socket hsg + cover)	No deterioration