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**General Header Product Specification**

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## **1. SCOPE**

### **1.1 Content**

*This general product specification is related to headers, tabs and pins, that are not explicitly described in a specific product specification. This general product specification supports how to define the general product properties of unspecified headers, tabs or pins.*

*This general product specification doesn't claim that the herewith specified products do cover all the requirements mentioned in the below listed product specifications.*

*This general product specification should give an outlook on possible areas of application. A validation with the relevant mating connector acc to the particular requirements is recommended.*

### **1.2 General Product Description**

*Headers are electrical connectors which provide an electrical connection between receptacle connectors and a PCB or similar electrical devices to be connected. It consists of a plastic housing and metal contacts (tabs / pins / busbars). Optional additional components are added for an improved overall performance or particular requirements. E.g. centerplate /centerfoil, metal shields. The general overall performance of headers, tabs or pins is defined (and usually limited) by the performance of the mating harness connector.*

### **1.3 Application of the specification**

*To define the area of possible applications in terms of a low voltage automotive connector system performance please refer to the below mentioned terminal and compliant pin product specifications and the listed standards.*

*Consider the relevant tab and pin sizes of the particular header, tab or pin in use.*

## 2. APPLICABLE DOCUMENTS

The following mentioned specifications and standards should support to define a possible product performance with the scope defined under 1.1 of this specification.

The specifications, statements and information on the customer drawing of the particular products takes precedence.

### 2.1 TE Specifications

#### A. Terminal Product specifications (mating male terminal size in brackets)

##### MQS Family

- [108-94545](#) PicoMQS Contact system (0.5 mm x 0.4 mm)
- [108-94648](#) PicoMQS Receptacle Housings Series (0.5 mm x 0.4 mm)
- [108-94099](#) NanoMQS Contact system (0.5 mm x 0.4 mm)
- [108-18030](#) MQS Contact system (0.63 mm x 0.63 mm)
- [108-18476-1](#) MPQ PQ Contact system (2.8 mm x 0.6 mm & 5.2 mm x 0.6 mm)

##### MCON Family

- [108-94342](#) MCON 0.5 Contact system (0.5 mm x 0.4 mm)
- [108-18782](#) MCON 1.2 Contact system (1.2 mm x 0.6 mm)
- [108-94002](#) MCON 2.8 Contact system (2.8 mm x 0.8 mm)
- [108-94421](#) MCON 8.0 Contact System (8.0 mm x 0.8 mm, 8.0 mm x 1.2 mm, 9.5 mm x 0.8 mm, 9.5 mm x 1.2 mm)
- [108-94518](#) MCON 12 Contact System (12 mm x 0.8 mm)

##### MCP Family

- [108-18716](#) MCP 1,5K Contact System (1.6 mm x 0.6 mm, 1.6 mm x 0.8 mm)
- [108-18513](#) MCP 2.8 Contact System (2.8 mm x 0.8 mm)
- [108-18717](#) MCP 2.8K Contact System (2.8 mm x 0.6 mm, 2.8 mm x 0.8 mm)
- [108-18718](#) MCP 4.8/6.3K Contact System (4.8mm x 0.8 mm, 5.8 mm x 0.8 mm, 6.3 mm x 0.8 mm)
- [108-18630-0](#) MCP 9.5 Contact System (9.5 mm x 0.8 mm, 9.5 mm x 1.2 mm)

##### Timer Family

- [108-18013](#) JT/JPT Contact System (2.8 mm x 0.8 mm, 3.0 mm x 0.8 mm)
- [108-18025-1](#) SPT Contact System (4.8mm x 0.8 mm, 5.8 mm x 0.8 mm, 6.3 mm x 0.8 mm)
- [108-18047-1](#) MPT Contact System (9.5 mm x 1.2mm)
- [108-18024](#) MT I Contact System (1.6 mm x 0.8 mm)
- [108-18055-1](#) MT II Contact System (1.6 mm x 0.6 mm)
- [108-18386](#) MT III Contact System (1.6 mm x 0.8 mm)

#### B. Multispring Product Specifications

- [108-90800](#) Product specification Multispring std diam 1.0 stock thickness 0.60...0.64
- [108-90801](#) Product specification Multispring diam 1.45 stock thickness 0.8
- [108-90806](#) Product specification Multispring diam 0.9mm hole stock thickness 0.6mm
- [108-90807](#) Product specification Multispring B diam 1.0 stock thickness 0.60...0.64
- [108-90808](#) Product specification Multispring B diam 1.53 stock thickness 0.8
- [108-90817](#) Product specification Multispring T diam 1.0 stock thickness 0.60...0.64
- [108-90818](#) Product specification Multispring T diam 1.45 stock thickness 0.80
- [108-90835](#) Product specification Nano Multispring B diam 0.60 stock thickness 0.40
- [108-90836](#) Product specification Nano Multispring diam 0.60 stock thickness 0.40
- [108-90837](#) Multispring N signal - Press-in zone for automotive use

- C. [109-1](#) *General Requirements for Test Specifications*
- D. [114-94201](#) *Contact Pins and Tabs for Shrouded Connection, retention force requirements*
- E. [TEC-109-11](#) *Solderability Dip Test*
- F. [TEC-109-201](#) *Component Heat Resistance to Lead-Free Reflow Soldering*
- G. [107-18078](#) *TE Standard Packaging Drop Test*

**2.2 Standards**

- A. *J-STD 020* *Reflow solderability test*
- B. *TLF 0214* *Validation of low voltage connectors for automotive applications*
- C. *Dimensional Accuracy* *DIN ISO 20457*

**3. GENERAL REQUIREMENTS AND CONDITIONS**

- 3.1 *Control dimensions:*  
*Parts after production 23 ° C ± 2 ° C and 50% ± 10% relative Humidity stored for 16 h at the earliest and no later than 72 hours after production.*
- 3.2 *General Regrind max. 25%*

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