# har-flexicon male connector, horizontal, SMC

RoHS compliant

## General information

| | | | | |
|---|---|---|---|---|
| Design | | male connector | | |
| Type | har-flexicon 3.50/3.81 MTH | har-flexicon 5.00 MTH | har-flexicon 5.08 MTH | |
| Part numbers | 1412xx14002xxx<br>1412xx15002xxx & 1412xx15006xxx | 1412xx16002xxx | 1412xx17002xxx & 1412xx17006xxx | |
| Contact pitch | 3.5 mm & 3.81 mm | 5mm | 5.08 mm | |
| No. of contacts | 2-25 poles | 2-19 poles | 2-20 poles | |
| Rated surge voltage (II/2) | 2,5 kV | 4 kV | 4 kV | (overvoltage cat. II / pollution degree 2) |
| Rated surge voltage (III/2) | 2,5 kV | 4 kV | 4 kV | (overvoltage cat. III / pollution degree 2) |
| Rated surge voltage (III/3) | 2,5 kV | 4 kV | 4 kV | (overvoltage cat. III / pollution degree 3) |
| Rated Voltage | 300 V | 300 V | 300 V | |
| Rated voltage (II/2) | 300 V | 600 V | 600 V | (overvoltage cat. II / pollution degree 2) |
| Rated voltage (III/2) | 150 V | 300 V | 300 V | (overvoltage cat. III / pollution degree 2) |
| Rated voltage (III/3) | 150 V | 250 V | 250 V | (overvoltage cat. III / pollution degree 3) |
| Working current | 11 A | 15 A | 15 A | |
| Usegroup B, rated voltage / current | 300 V / 11 A | 300 V / 15 A | 300 V / 15 A | |
| Usegroup C, rated voltage / current | - / - | - / - | - / - | |
| Usegroup D, rated voltage / current | 300 V / 11 A | 300 V / 15 A | 300 V / 15 A | |
| Contact resistance | max. 15 mOhm | | | |
| Insulation resistance | min. $10^9$ Ohm (500 V DC) | | | |
| Temperature range | -40°C ... +110°C | | | |
| Termination technology | THR/SMC Reflow | | | |
| Insertion force | max. 3 N | | | |
| Withdrawal force | min. 1.5 N | | | |
| Hot plugging | No | | | |
| Mechanical Shock IEC 61373 (05/10) | 5 g, 30 ms, 5 shocks/axis and each direction no contact disturbance >= 1 µs | | | for p/n ...6xxx |
| Random Vibration IEC 61373 (05/10) | Cat 1 class B 5.72 $m/s^2$ no contact disturbance >= 1 µs | | | for p/n ...6xxx |
| Vibration | 10-150 Hz, 0.35 mm, 5 g, 2 h each axes -> No contact disturbance >= 1 µs | | | for p/n ...2xxx |
| RoHS - compliant | Yes | | | |
| UL file | E314677 | | | |

## Isulator material

| | |
|---|---|
| Material | PA/PPA |
| Color | black |
| UL classification | UL 94-V0 |
| Material group acc. to. IEC 60664-1 | I (CTI > 600) |

## Contact material

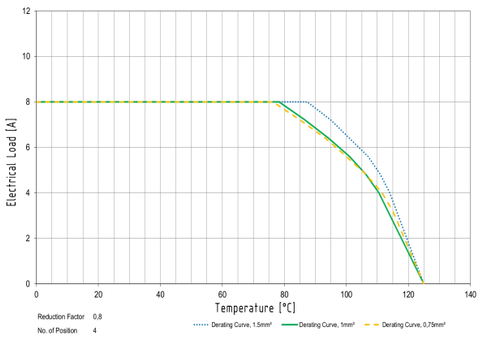
| | |
|---|---|
| Contact material | Copper alloy |
| Plating termination zone | Sn |
| Plating contact zone | Sn |

## Derating

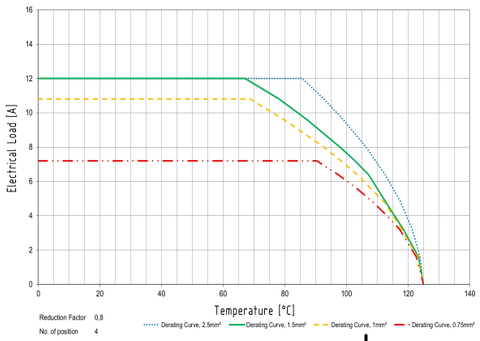
The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity curve is valid for continuous, non interrupted current loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60512-5

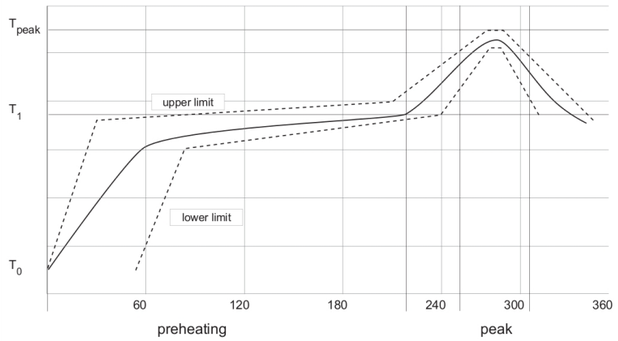
Derating: har-flexicon 3.50/3.81 MTH




Derating: har-flexicon 5.00/5.08 MTH




## Soldering instructions for lead-free tin soldering




preheating

| | |
|---|---|
| T0 | 25°C (77°F) |
| T1 | from 150°C (302°F) to 190°C (374°F) |
| time | from 150s to 180s |
| gradient | 1,5°C/s (34°F/s) |

peak

| | |
|---|---|
| Tpeak | from 260°C (500°F) to 275°C (527°F) |
| time | from 10s to 30s |

har-flexicon SMC products with pure tin plated pins without lead, can be soldered by a lead-free reflow process, with a peak temperature till 275°C/527°F according to the related profile.

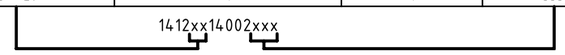
## Packging unit

types 5.00/5.08 MTH

| Type of packaging | No. of poles (xx) | Quantity | MOQ | Index (xxx) | Remark |
|---|---|---|---|---|---|
| tropical bag | 2 - 3 | 100 | 100 | 000 | |
| tropical bag | 4 - 5 | 75 | 75 | 000 | |
| tropical bag | 6 - 20 | 50 | 50 | 000 | |
| box | 2 - 20 | 1 | 1 | 333 | samples |

types 3.50/3.81 MTH

| Type of packaging | No. of poles (xx) | Quantity | MOQ | Index (xxx) | Remark |
|---|---|---|---|---|---|
| tropical bag | 2 - 3 | 100 | 100 | 000 | |
| tropical bag | 4 - 5 | 75 | 75 | 000 | |
| tropical bag | 6 - 20 | 50 | 50 | 000 | |
| tropical bag | 21 - 25 | 25 | 25 | 000 | |
| box | 2 - 20 | 1 | 1 | 333 | samples |




All Dimensions in mm
Original Size DIN A3

Scale 1:1

Free size tol.

Ref.

Sub.

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Department EC PD - DE

| Created by | Inspected by | Standardisation | Date | State |
|---|---|---|---|---|
| TADJE | ELLERMANN | HOFFMANN | 2016-06-02 | Final Release |

Title: har-flexicon male connector, horizontal, SMC

Doc-Key / ECM-Nr.: 100579724/UGD/000/D 500000105082

Type: DS

Number: 14121300201

Rev.: D

Page: 1/1

HARTING Electronics GmbH
D-32339 Espelkamp

A3

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

HARTING:

14120317002000 14120517002000 14121015002000 14121017002000 14121216002000 14120216002000
14120316002000 14120415002000 14120416002000 14120516002000 14120614002000 14120816002000
14121014002000 14120215002000 14120314002000 14120414002000 14120616002000 14120617002000
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14120615002000 14121214002000 14120217002000 14120315002000 14120815002000 14121016002000

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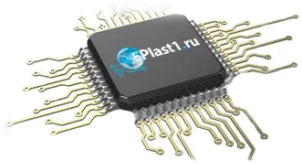


**Как с нами связаться**

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