

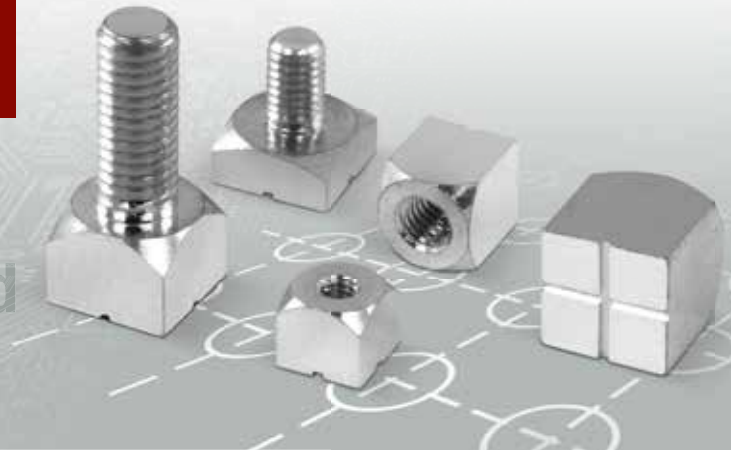
PowerOne SMD

SMD Technology



Original
POWEELEMENT
Intelligent Systems

300 A Inline Processing
reliable established
configurable
SMD Technology



PowerOne SMD high current terminals are the result of the consequent advancement of our products in our customer's interest. The Power Elements are processable in the common SMT lines and are soldered in the infrared oven or with the vapor-phase system. Depending on the layout, currents of up to 300 ampere are possible. That is the reason why Power Elements perfectly qualify as connecting elements for fuses and cables to the circuit board or as mounting element.

Application Possibilities

- Board-to-board
- Wire-to-board screw connection of ring terminals
- Retainers/fastening fuses
- For mounting

Processing

Würth Elektronik PowerPlus SMD Power Elements are soldered onto the circuit board which easily fits in to the processing chain of an SMT line. Due to the heat absorption of the component mass, individual tests are necessary for defining the parameters.

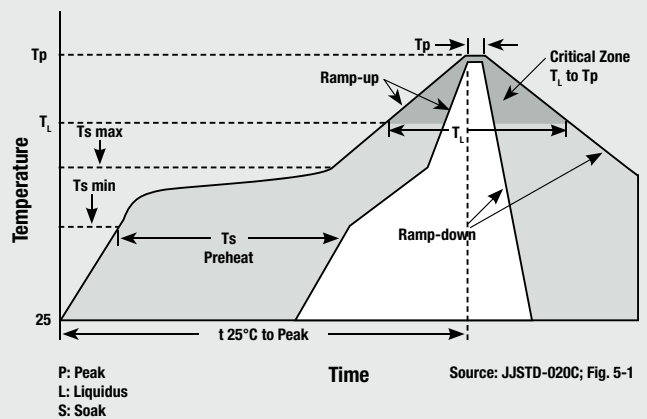
Technical Data

Current carrying capacity at 85 °C	see table on the back
Material	CuZn39Pb3
Surface	tin-plated (standard)

Dimensions

Length x width	from 9 x 9 mm
Height	from 7,5 mm

Würth Elektronik Test Arrangement – Soldering Profile



Compliant



Original Powerelement
in the online shop:
www.we-online.com/pe

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Circuit Board Design

The circuit boards should be manufactured according to the valid IPC A 600. Footprint indications are available.

Recommendation Specifications

IPC A 600	Acceptability of Printed Boards
IPC TM 650	Acceptability of Assemblies (Test Methods)

Torques

The torques indicated in the table are based on DIN 267 part 25 and on IPC TM 650 regarding the adhesive strength of copper foil on FR4. Different material combinations or different thread lengths of the connectors are not regarded here.

Torques

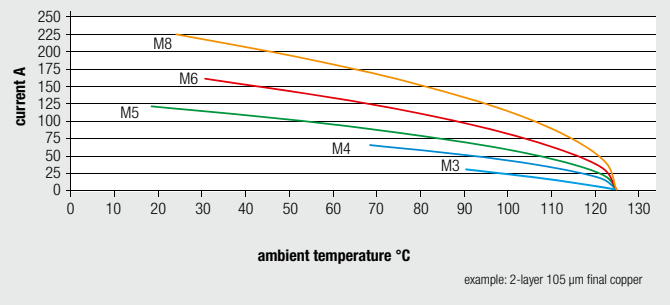
Thread	M 3	M 4	M 5	M 6	M 8
(Nm)	0,5	1,2	2,2	3,9	9

Current Carrying Capacity

The current carrying capacity needs to be seen in the context of the overall system. Our measurements have shown that the limiting factor usually lies in the PCB layout or in the connection of feed lines.

Reference values for a pre-dimensioning can be found in the table below.

Derating Curve



Vibration Test / Mechanical Shock Test:

PowerOne SMD high current power terminals have passed the vibration testing and mechanical shock testing according to ISO 16750-3 successfully. Vibration test according ISO 16750-3:2012 4.1.2.7 Random Test VII. Mechanical shock test according to ISO 16750-3:2012 4.2.2.2 Severity 2.

Overview of Standard Products



		M3	M4	M5	M6	M8
Bolt	Part-No.	98065	97876	97877	97878	97879
Bush	Part-No.	97987	97871	97872	97873	97874
Current carrying capacity at 85 °C		~ 54 A	~ 72 A	~ 98 A	~ 130 A	~ 198 A

For more information visit us at:
www.we-online.com/pe
 or call our Hotline: +49 7940 9810-4444