

# Glass Passivated 3 Phase Bridge Rectifiers

## V<sub>RRM</sub> 50 Volts to 1600 Volts, 25A

**multicomp** PRO

**RoHS  
Compliant**



**SBRG**

### Features

- Low forward voltage drop
- High current capability
- High reliability
- Case: Epoxy case with heat sink
- Polarity: Symbol marked on body
- Bolt pass through the mounting hole of body then fix to heat sink
- Mounting torque: 2 N.m
- Lead free

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	MP001014	MP001015	MP001016	MP001017	MP001018	MP001019	MP001020	MP001021	MP001022	MP001023	Unit
Max. Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	1200	1400	1600	V
Max. RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	840	980	1120	
Max. DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	1200	1400	1600	
Peak Non-Repetitive Reverse Voltage	V <sub>RSM</sub>	75	150	275	500	725	900	1100	1300	1500	1700	
Max. Average Forward Rectified Current @ T <sub>c</sub> = 55°C	I <sub>(AV)</sub>	25										A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	320										
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	I <sup>2</sup> t	424										A <sup>2</sup> s
Peak Forward Voltage per Diode at 12.5A DC	V <sub>F</sub>	1.1										V
Max. DC Reverse Current at Rated @T <sub>J</sub> = 25°C	I <sub>R</sub>	5										µA
DC Blocking Voltage per Diode @T <sub>J</sub> = 150°C		3										mA
RMS Isolation Voltage from Case to Lead	V <sub>ISO</sub>	2500										V
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150										°C
Storage Temperature Range	T <sub>STG</sub>											

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**Rating and Characteristic Curves**

Fig. 1 - Forward Current Derating Curve

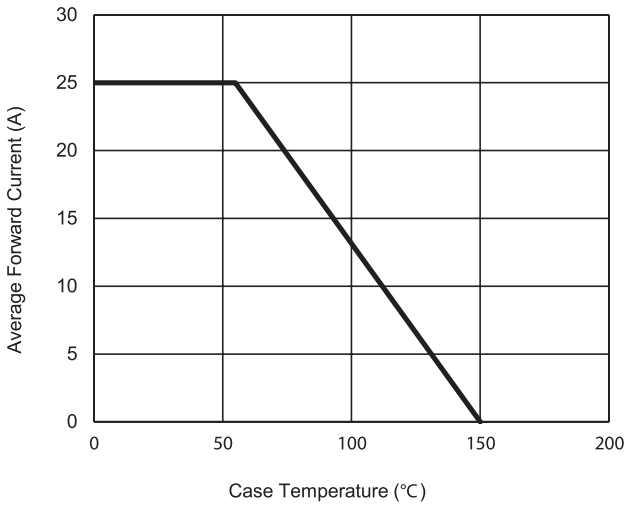


Fig. 2 - Maximum Non-Repetitive Surge Current

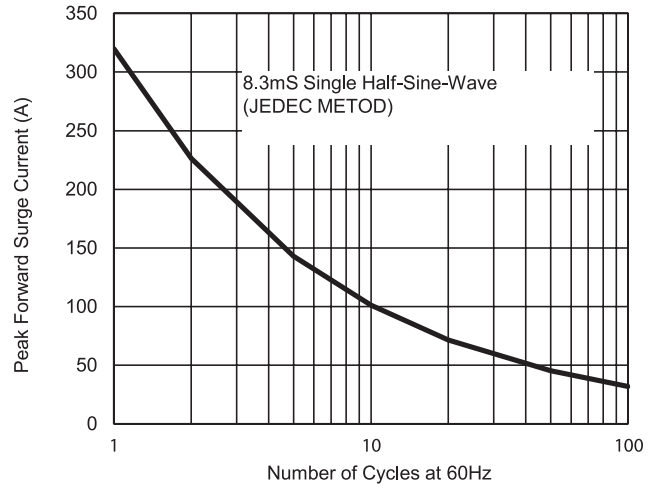


Fig. 3 - Typical Reverse Characteristics

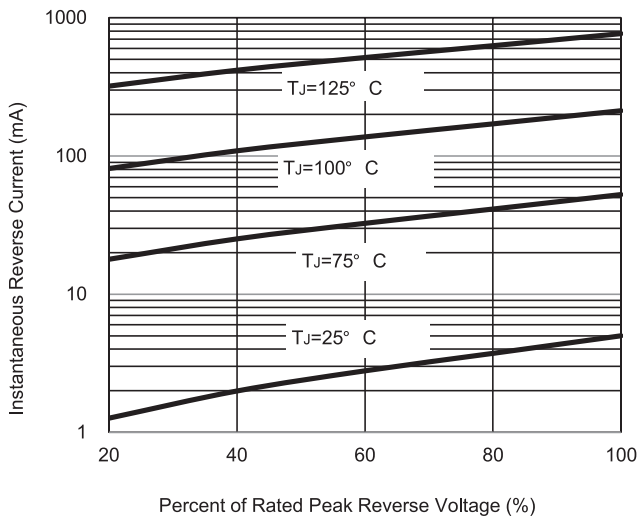
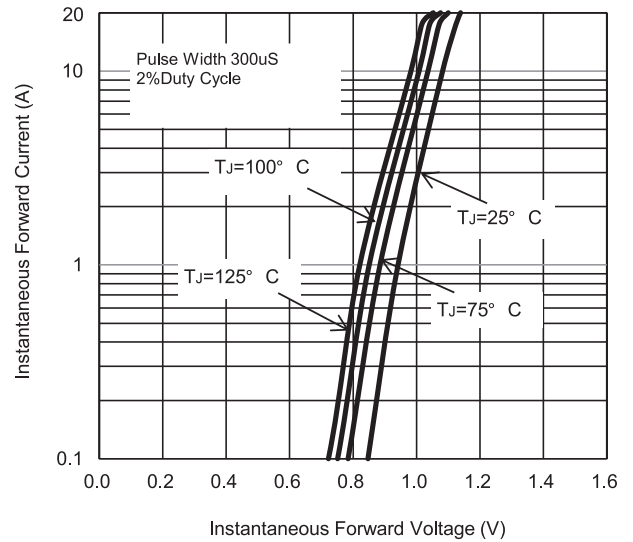


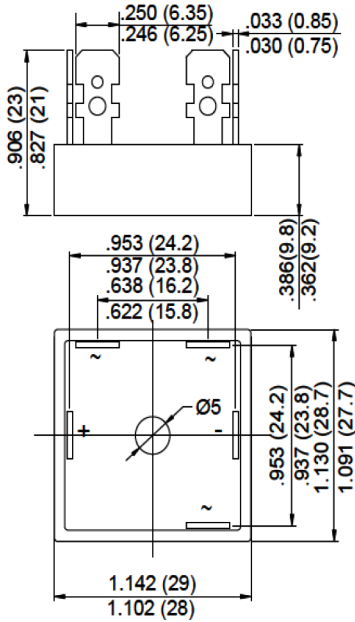
Fig. 4 - Typical Forward Characteristics



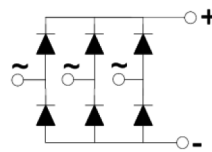
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**Diagram**



**Schematic**



Dimensions : Inches (Millimetres)

**Part Number Table**

Description	Part Number
Bridge Rectifier, 3-Phase, 25A, 50V, SBRG Quick Connect	MP001014
Bridge Rectifier, 3-Phase, 25A, 100V, SBRG Quick Connect	MP001015
Bridge Rectifier, 3-Phase, 25A, 200V, SBRG Quick Connect	MP001016
Bridge Rectifier, 3-Phase, 25A, 400V, SBRG Quick Connect	MP001017
Bridge Rectifier, 3-Phase, 25A, 600V, SBRG Quick Connect	MP001018
Bridge Rectifier, 3-Phase, 25A, 800V, SBRG Quick Connect	MP001019
Bridge Rectifier, 3-Phase, 25A, 1kV, SBRG Quick Connect	MP001020
Bridge Rectifier, 3-Phase, 25A, 1.2kV, SBRG Quick Connect	MP001021
Bridge Rectifier, 3-Phase, 25A, 1.4kV, SBRG Quick Connect	MP001022
Bridge Rectifier, 3-Phase, 25A, 1.6kV, SBRG Quick Connect	MP001023

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