



Silicon Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts
Forward Current - 50 Amperes

Features

- Low forward voltage drop
- Electrically isolated base -2000 Volts
- High surge forward current capability
- Materials used carries U/L recognition

Mechanical Data

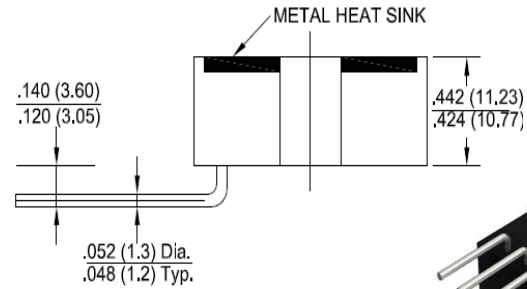
- Polarity: Symbol Marked on body
- Mounting position: Any

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

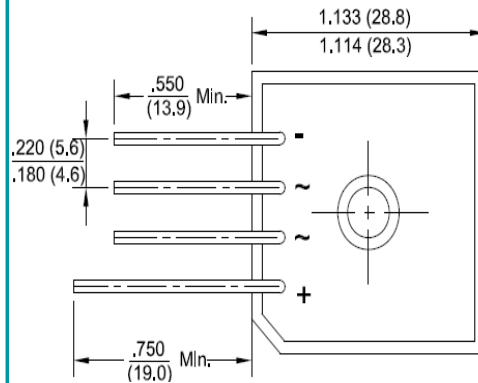
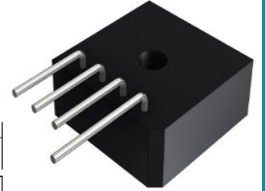
Applications

- General purpose use in AC/DC bridge full wave rectification, for power supply, industrial automation applications, etc.

BR-L



RoHS
COMPLIANT



Package Outline Dimensions in Inches (Millimeters)

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	BR	BR	BR	BR	BR	BR	BR	Unit
		5005L	501L	502L	504L	506L	508L	5010L	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum Average Forward Rectified Current @T _c =55 °C	I _(AV)	50							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	500							A
I ² t Rating for Fusing (t<8.3mS)	I ² t	1037.5							A ² s
Peak Forward Voltage per Diode at 25A DC	V _F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Diode @T _J =25°C	I _R	10							µA
Operating Junction Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C



Fig. 1 - Forward Current Derating Curve

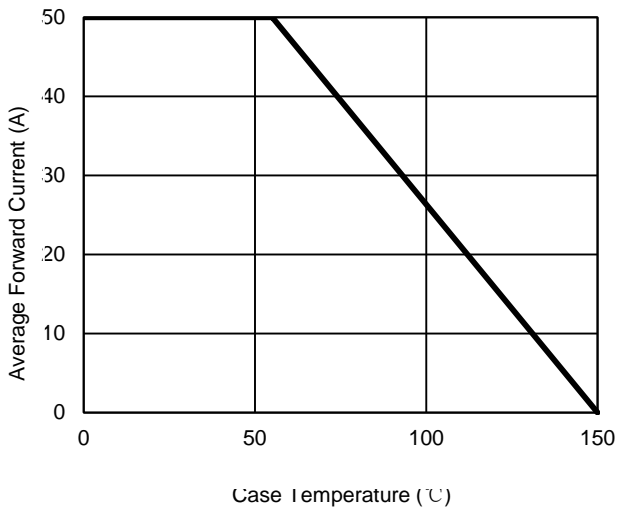


Fig. 2 - Maximum Non-Repetitive Surge Current

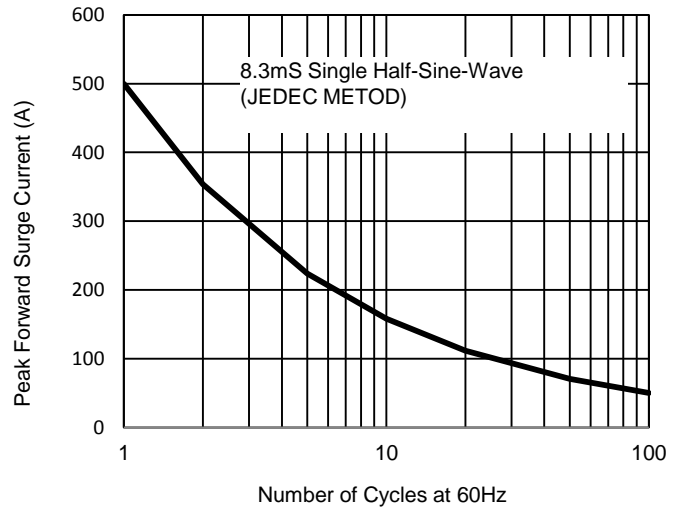


Fig. 3 - Typical Reverse Characteristics

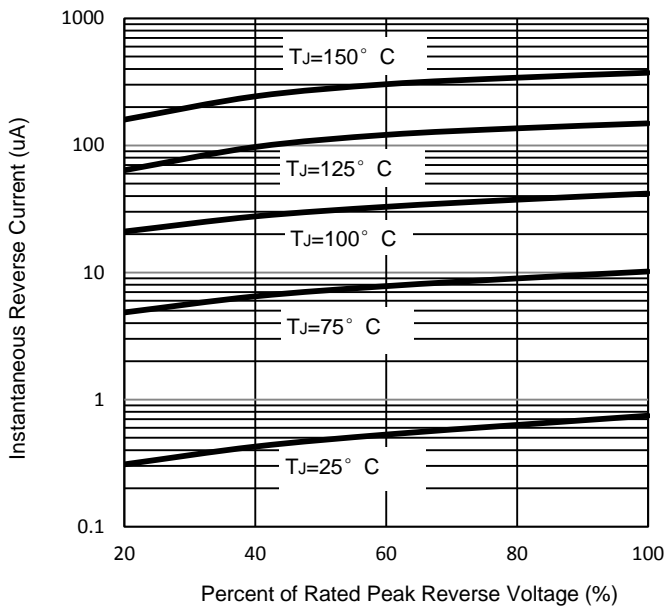
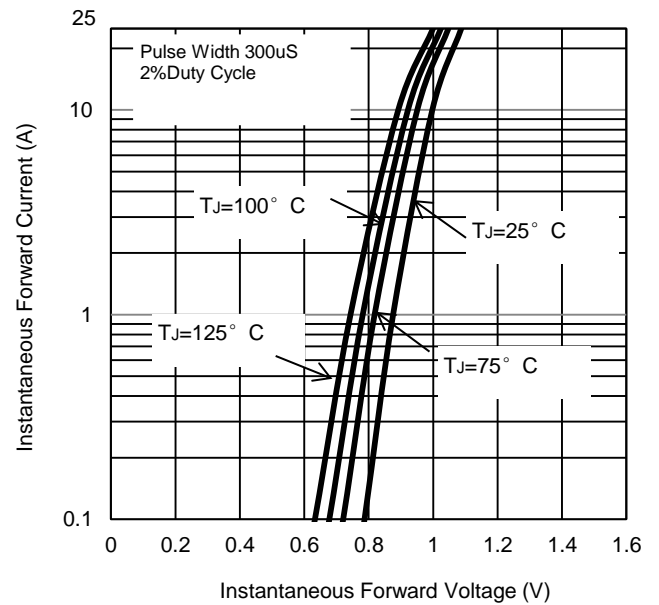


Fig. 4 - Typical Forward Characteristics





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