



Silicon Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts
Forward Current - 10 Amperes

Features

- Low forward voltage drop
- Ideal for printed circuit board
- High surge forward current capability

Mechanical Data

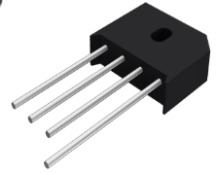
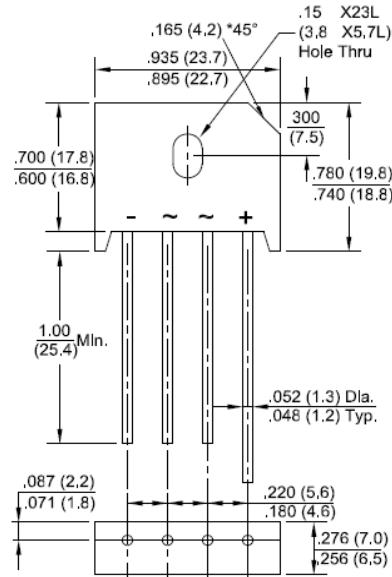
- Polarity: Symbol Marked on body
- Mounting position: Any

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

Applications

- General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.

KBU



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%.

Characteristic	Symbol	KBU	KBU	KBU	KBU	KBU	KBU	KBU	UNIT	
		10005	1001	1002	1004	1006	1008	1010		
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 DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current (with heatsink Note 1) @ T _C =100°C (without heatsink)	I _(AV)	10.0							3.0	A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	240								A
I ² t Rating for Fusing (t<8.3mS)	I ² t	240								A ² s
Peak Forward Voltage Per Diode at 5A DC	V _F	1.0								V
Maximum DC Reverse Current at Rated @T _J =25°C	I _R	10								µA
DC Blocking Voltage per Diode @T _J =125°C		500								
Operating Junction Temperature Range	T _J	-55 to+150							°C	
Storage Temperature Range	T _{STG}	-55 to+150							°C	

Note: Device mounted on 100mm*100mm*1.6mm Cu plate heatsink.



Fig. 1 - Forward Current Derating Curve

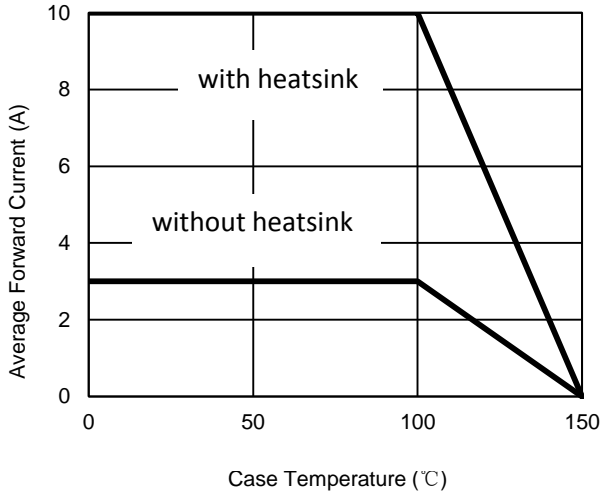


Fig. 2 - Maximum Non-Repetitive Surge Current

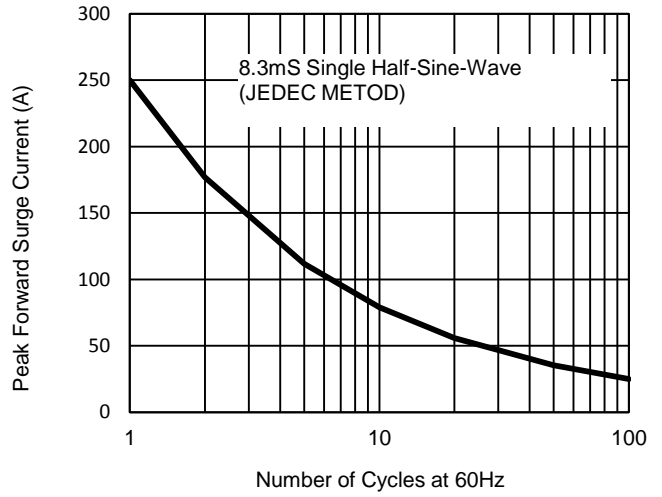


Fig. 3 - Typical Reverse Characteristics

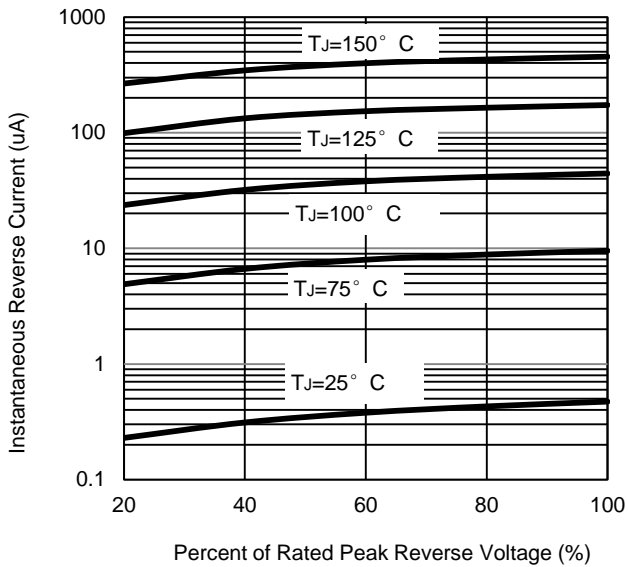
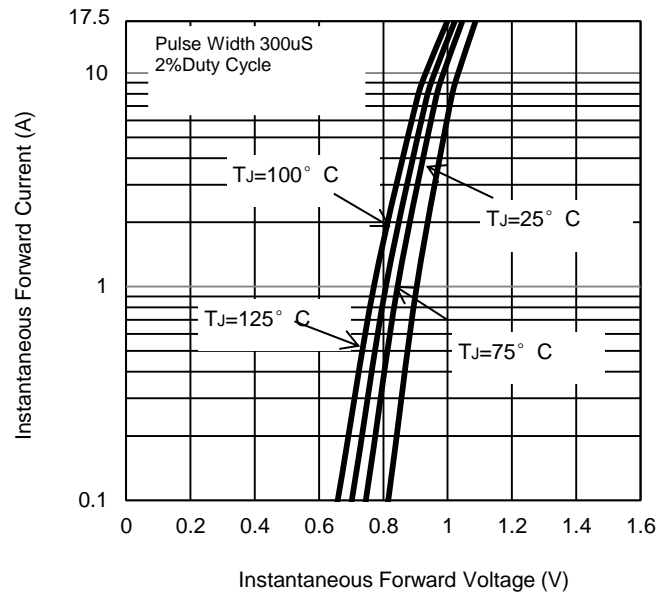


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.



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