

Silicon Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts
Forward Current - 25 Amperes

Features

- Low forward voltage drop
- Ideal for printed circuit board
- High surge forward current capability
- Meet UL flammability classification 94V-0

Mechanical Data

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

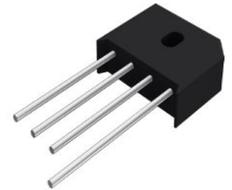
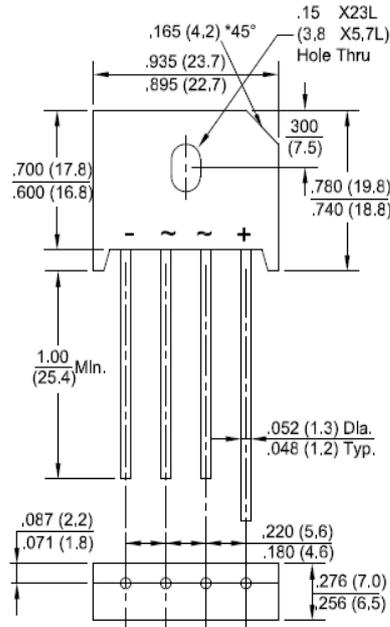
Note: Products with logo

are made by STS Electronic (Cayman) Limited.

Applications

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

KBU



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	KBU	KBU	KBU	KBU	KBU	KBU	KBU	Unit
		25005	2501	2502	2504	2506	2508	2510	
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)	25.0 4.2							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	350							A
I ² t Rating for Fusing (t<8.3mS)	I ² t	664.0							A ² s
Peak Forward Voltage per Diode at 17.5A DC	V _F	1.1							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

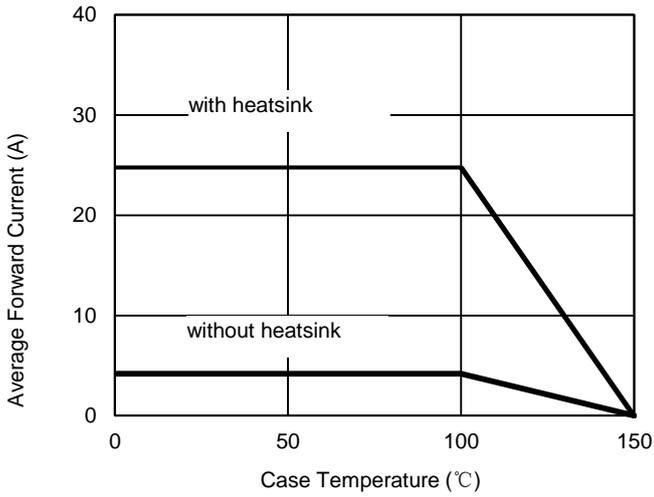


Fig. 2 - Maximum Non-Repetitive Surge Current

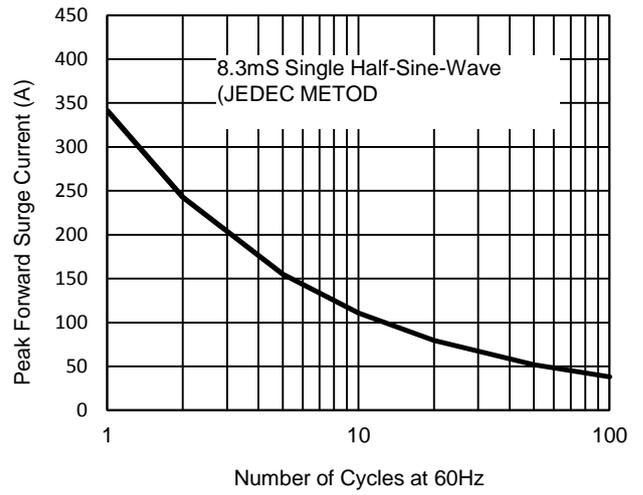


Fig. 3 - Typical Reverse Characteristics

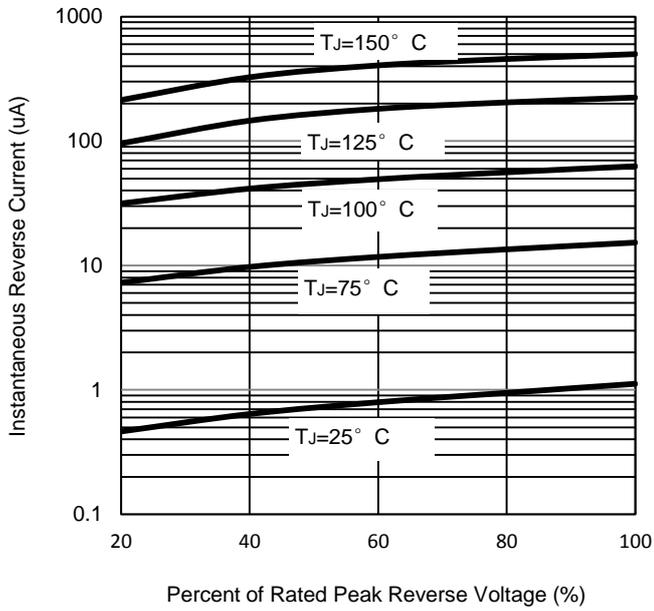


Fig. 4 - Typical Forward Characteristics

