



Glass Passivated Bridge Rectifiers

Reverse Voltage 50 - 1000 Volts
Forward Current - 8.0 Amperes

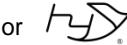
Features

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

Mechanical Data

- Polarity: Symbol marked on body

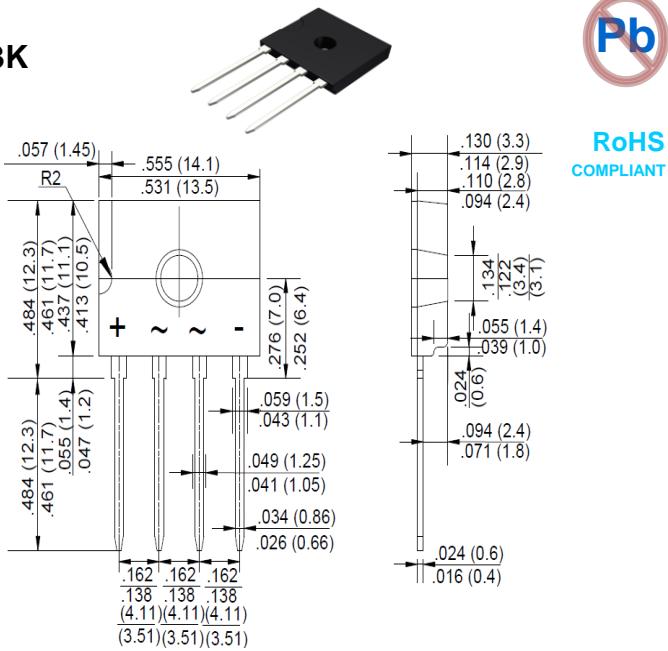
- Mounting position: Any

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.

D3K



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	D8KB05	D8KB1	D8KB2	D8KB4	D8KB6	D8KB8	D8KB10	Unit
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 @TC=125 °C (with heatsink)	I _(AV)					8			A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}					170			A
I ² t Rating for Fusing (t<8.3mS)	I ² t				119.9				A ² s
Peak Forward Voltage per Diode at 4.0A DC	V _F				1.0				V
Typical Thermal Resistance to Ambient (Note1) (with heatsink)	R _{θJA}				12				°C/W
Typical Thermal Resistance to case (Note1) (with heatsink)	R _{θJC}				2.5				
Typical Thermal Resistance to lead (Note1) (with heatsink)	R _{θJL}				2				
Maximum DC Reverse Current at Rated @T _J =25°C	I _R				5.0				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: 1. Device mounted on 75mm*75mm*1.6mm Cu plate heatsink.

2. The typical data above is for reference only.

Rating and Characteristic Curves

D8KB05 thru D8KB10



Fig. 1 - Forward Current Derating Curve

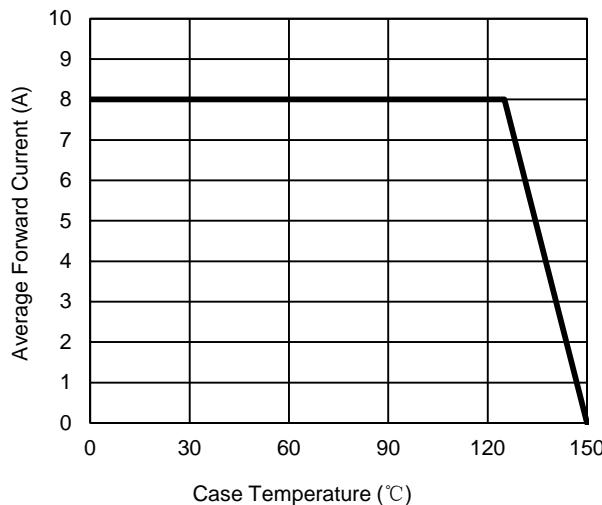


Fig. 2 - Maximum Non-Repetitive Surge Current

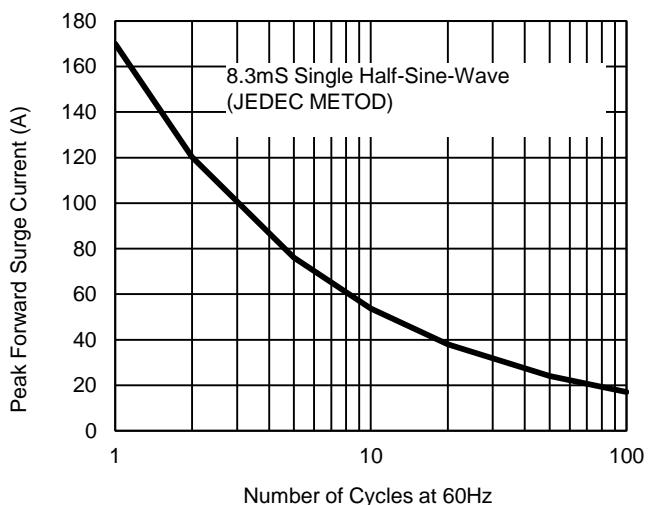


Fig. 3 - Typical Reverse Characteristics

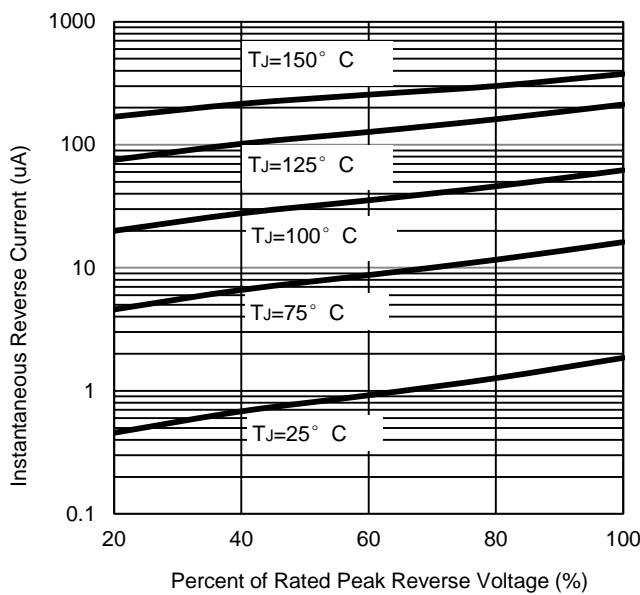
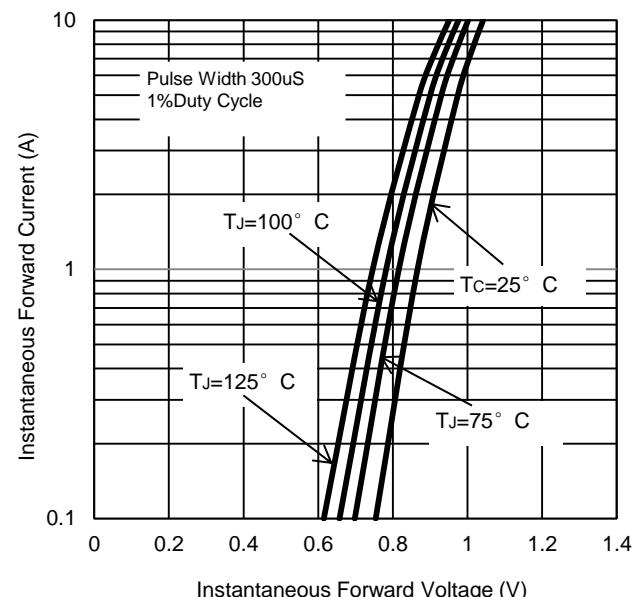


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.

D8KB*-U-00-00

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