

**Low VF Glass Passivated Bridge Rectifiers****Reverse Voltage - 600 Volts**  
**Forward Current - 6.0 Amperes****Features**

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

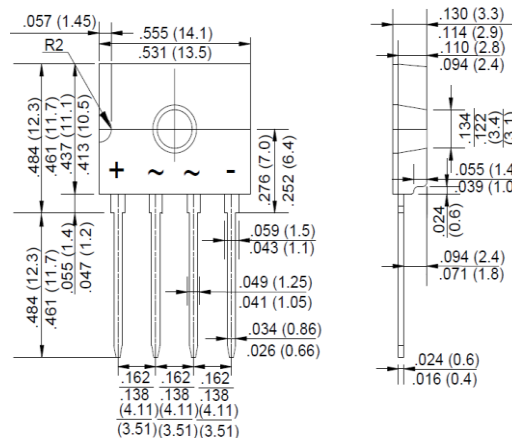
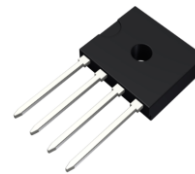
**Mechanical Data**

- 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	D6KB6U	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	600	V
Maximum Average Forward Rectified Current @T <sub>C</sub> =120 °C (with heatsink)	I <sub>(AV)</sub>	6	A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	170	A
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	I <sup>2</sup> t	120	A <sup>2</sup> s
Peak Forward Voltage per Diode at 3.0A DC	V <sub>F</sub>	0.9	V
Typical Thermal Resistance to Ambient	R <sub>θJA</sub>	45	°C/W
Typical Thermal Resistance to case	R <sub>θJC</sub>	6	
Typical Thermal Resistance to lead	R <sub>θJL</sub>	9	
Maximum DC Reverse Current at Rated @T <sub>J</sub> =25°C	I <sub>R</sub>	5.0	μA
DC Bolcking Voltage per Diode @T <sub>J</sub> =125°C		120	
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

Note: The typical data above is for reference only



Fig. 1 - Forward Current Derating Curve

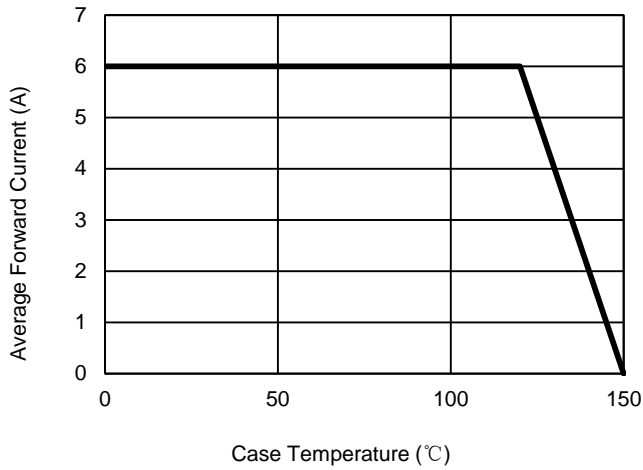


Fig. 2 - Maximum Non-Repetitive Surge Current

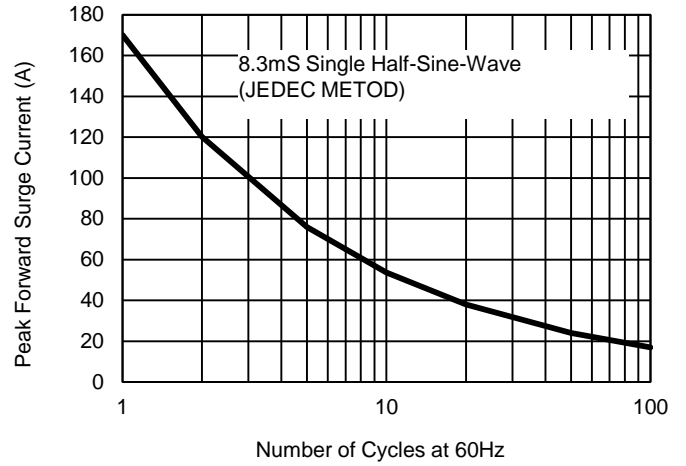


Fig. 3 - Typical Reverse Characteristics

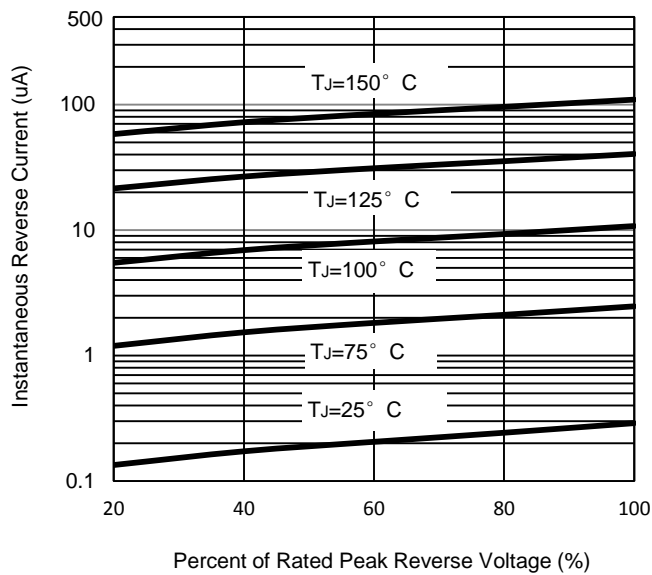
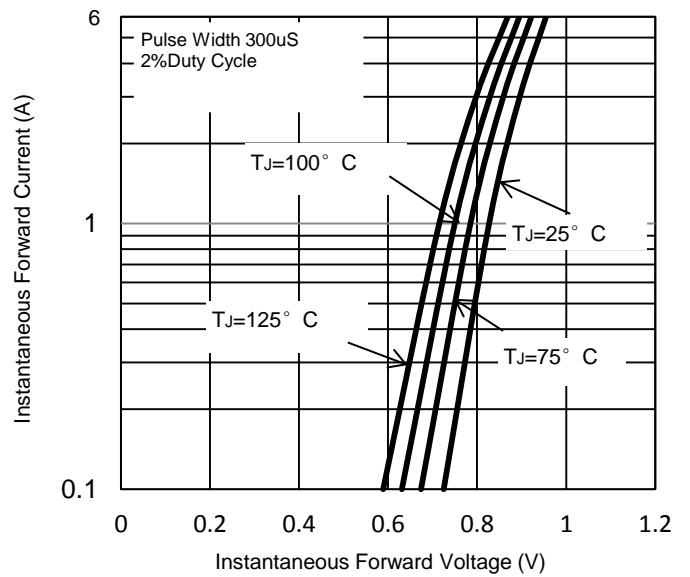


Fig. 4 - Typical Forward Characteristics





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