



Low VF Glass Passivated Bridge Rectifiers

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

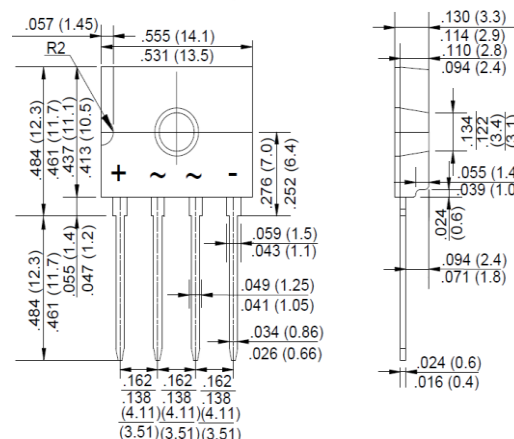
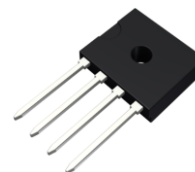
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Applications

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

Reverse Voltage - 600 Volts
Forward Current - 6.0 Amperes

D3K



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 _{RRM}	600	V
Maximum RMS Voltage	V _{RMS}	420	V
Maximum DC Blocking Voltage	V _{DC}	600	V
Maximum Average Forward Rectified Current @T _c =120 °C(with heatsink)	I _(AV)	6	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	120	A ² s
Peak Forward Voltage per Diode at 3.0A DC	V _F	0.9	V
Typical Thermal Resistance to Ambient	R _{θJA}	45	°C/W
Typical Thermal Resistance to case	R _{θJC}	6	
Typical Thermal Resistance to lead	R _{θJL}	9	
Maximum DC Reverse Current at Rated @T _J =25°C	I _R	5.0	μA
DC Blocking Voltage per Diode @T _J =125°C		120	
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

Note: The typical data above is for reference only



Fig. 1 - Forward Current Derating Curve

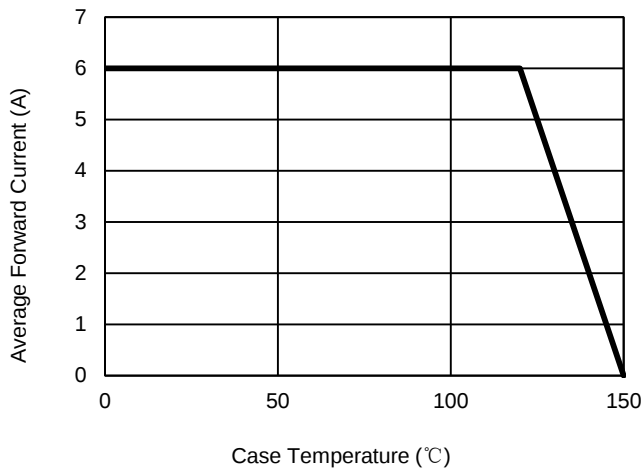


Fig. 2 - Maximum Non-Repetitive Surge Current

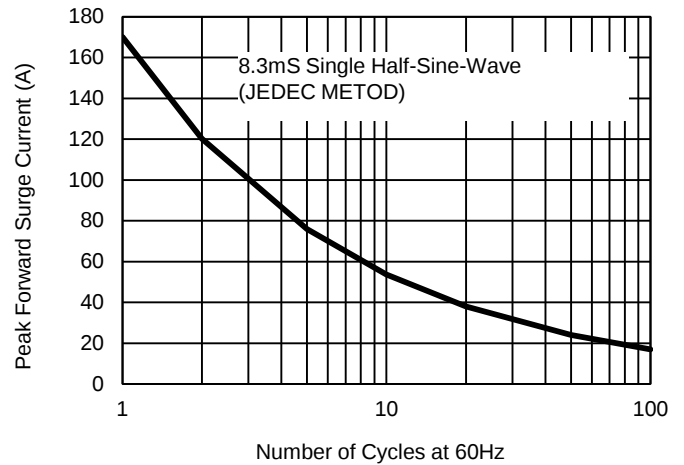


Fig. 3 - Typical Reverse Characteristics

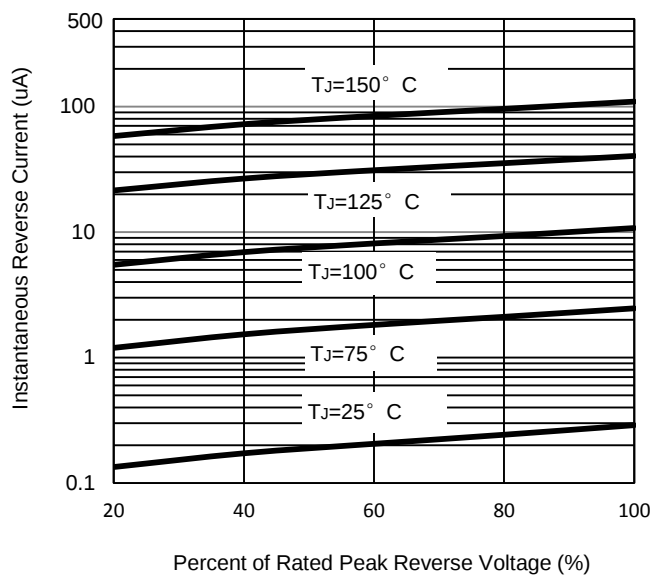
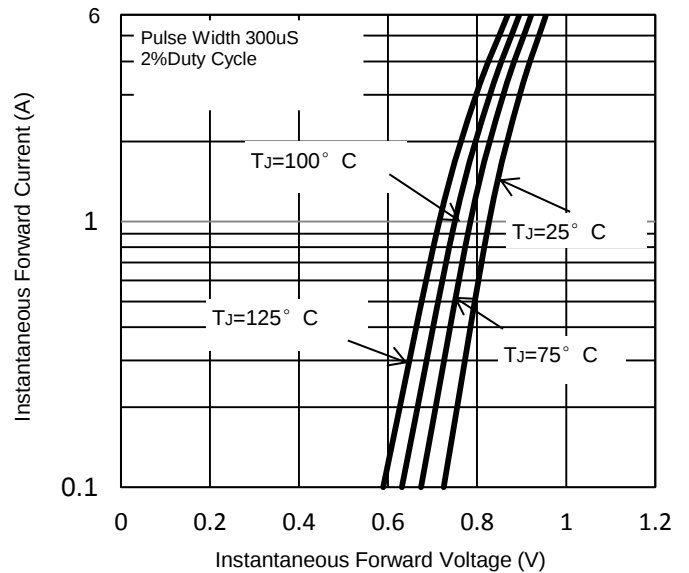


Fig. 4 - Typical Forward Characteristics





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