



Low VF Glass Passivated Bridge Rectifiers

Reverse Voltage - 600 Volts
Forward Current - 3.0 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

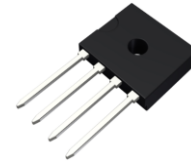
- Polarity: Symbol marked on body
- Mounting position: Any

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

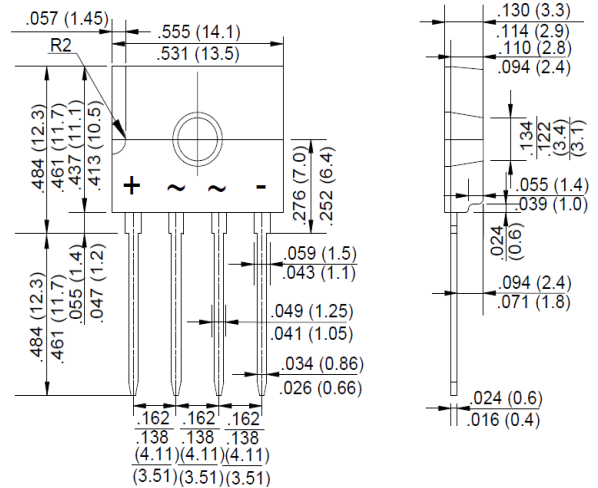
Applications

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

D3K



RoHS COMPLIANT



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	D3KB6F	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 @ T _c =140°C (with heatsink)	I _(AV)	3	A
Rectified Current@ T _a =29°C (without heatsink)		1.2	
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	90	A
I ² t Rating for Fusing (t<8.3ms)	I ² t	33.6	A ² s
Peak Forward Voltage per Diode at 1.5A DC	V _F	0.95	V
Typical Thermal Resistance to Ambient (without heatsink)	R _{θJA}	37	°C/W
Typical Thermal Resistance to case (with heatsink (Note2))	R _{θJC}	1.5	°C/W
Typical Thermal Resistance to lead (without heatsink)	R _{θJL}	5.5	°C/W
Maximum DC Reverse Current at Rated @T _J =25°C	I _R	5	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

Notes: 1. Device mounted on 50mm*50mm*1.6mm Cu plate heatsink.
2.The typical data above is for reference only



Fig. 1 - Forward Current Derating Curve

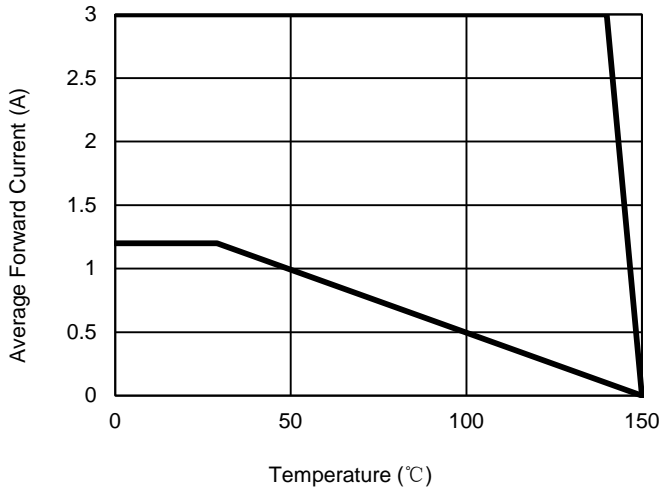


Fig. 2 - Maximum Non-Repetitive Surge Current

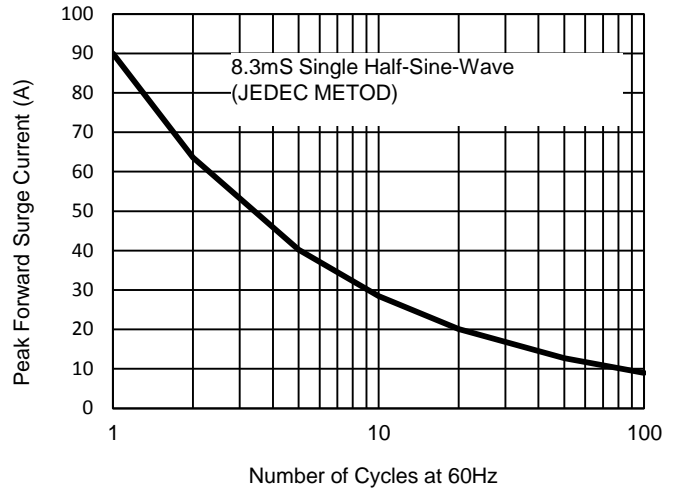


Fig. 3 - Typical Reverse Characteristics

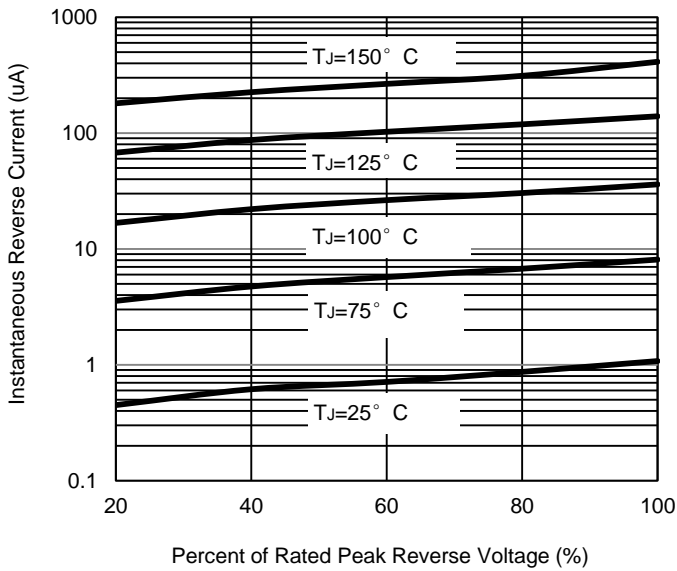
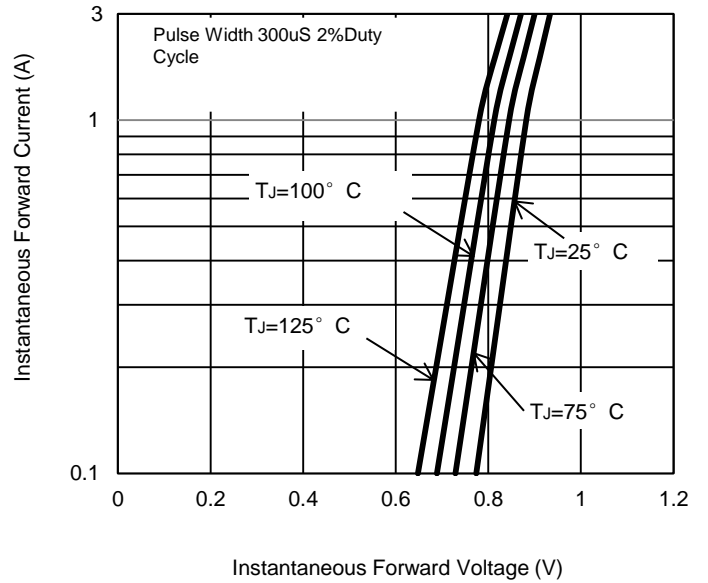


Fig. 4 - Typical Forward Characteristics





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