

Passivated Bridge Rectifiers

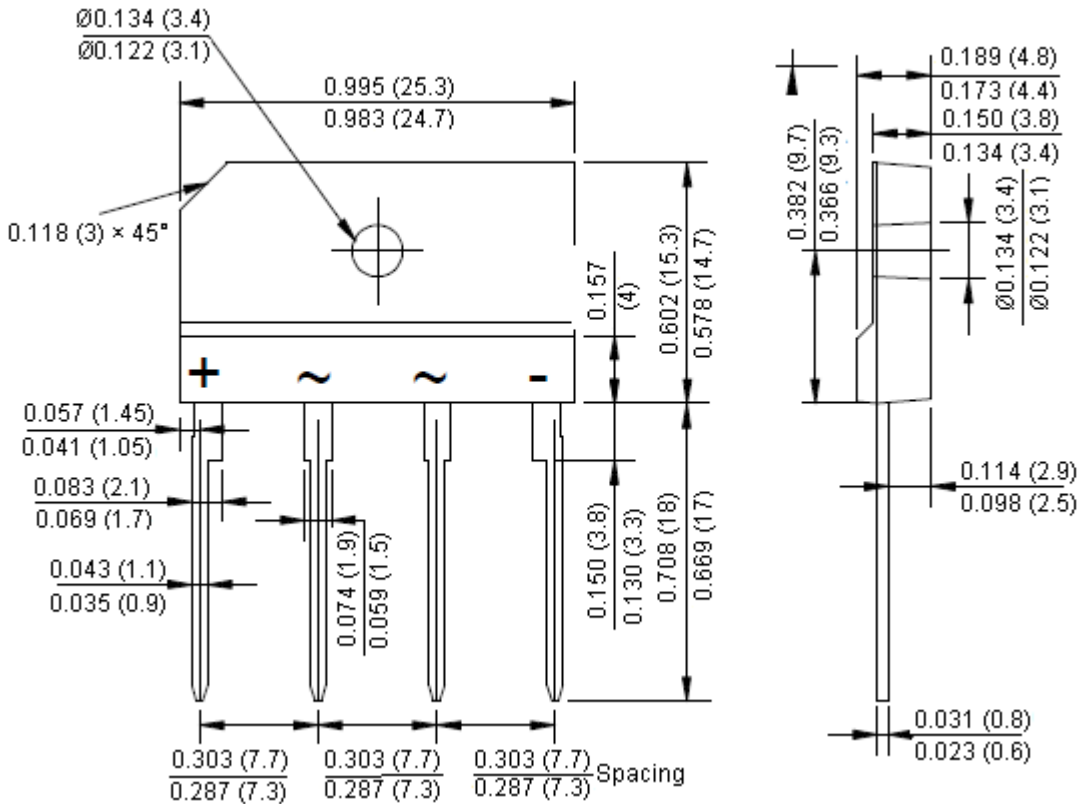


Features:

- Surge overload rating -150 amperes peak.
- Ideal for printed circuit board.
- Reliable low cost construction utilizing moulded plastic technique.
- Mounting position : Any.

Reverse Voltage - 50 to 1,000 Volts
Forward Current - 4 Amperes

VSIB



Dimensions : Inches (Millimetres)



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Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

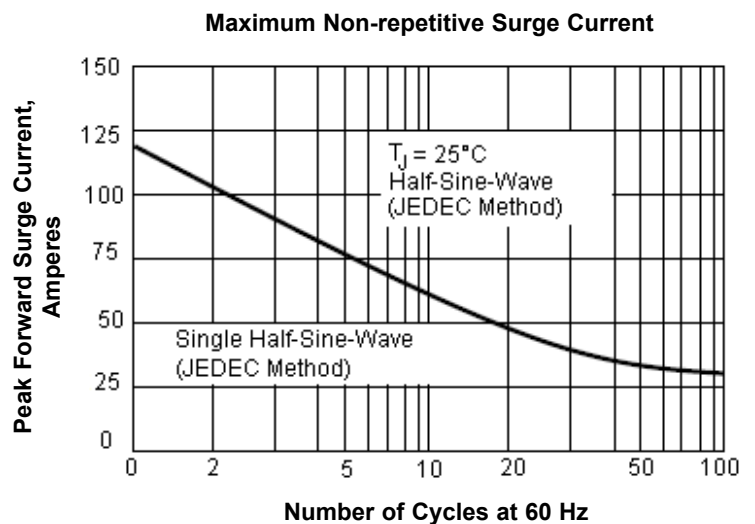
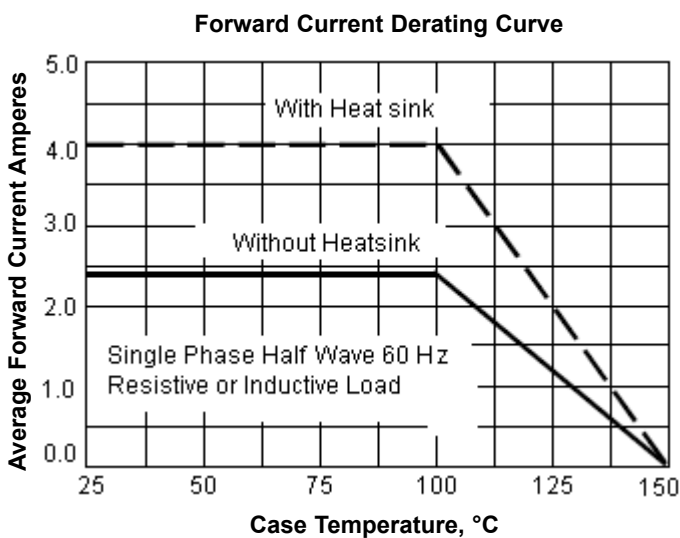
Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	VSIB405	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	V
Maximum RMS Voltage	V_{RMS}	35	
Maximum DC Blocking Voltage	V_{DC}	50	
Maximum Average Forward (with heatsink Note 2) Rectified Current at $T_C = 100^\circ\text{C}$ (without heatsink)	$I_{(AV)}$	4 2.4	A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	120	
Maximum Forward Voltage at 4 A dc	V_F	1.1	V
Maximum DC Reverse Current at $T_J = 25^\circ\text{C}$ at Rated DC Blocking Voltage at $T_J = 125^\circ\text{C}$	I_R	10 500	μA
I^2t Rating for Fusing ($t < 8.3$ ms)	I^2t	93	A^2s
Typical Junction Capacitance Per Element (Note 1)	C_J	45	pF
Typical Thermal Resistance	$R_{\theta JC}$	2.2	$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}		

- Notes :** 1. Measured at 1 MHz and applied reverse voltage of 4 V dc.
2. Device mounted on 50 × 50 × 1.6 mm Cu plate heatsink.

Rating and Characteristic Curves

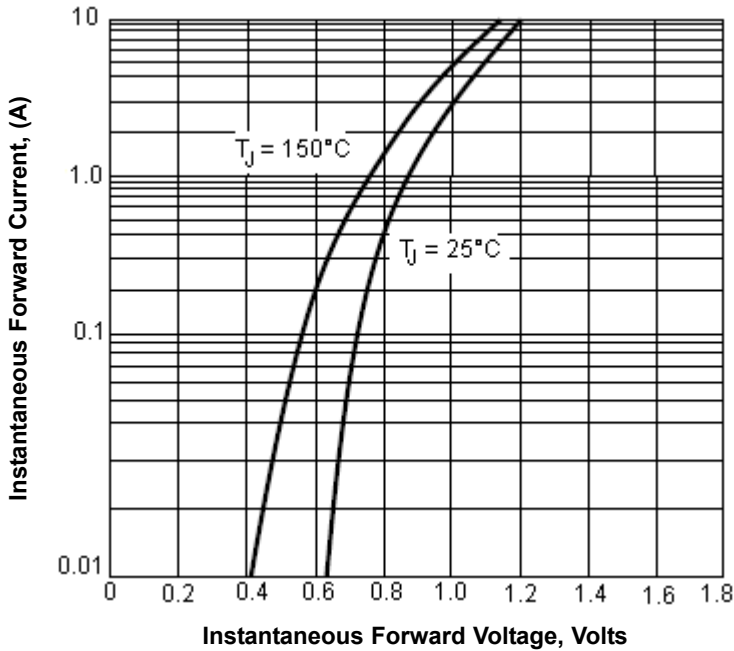


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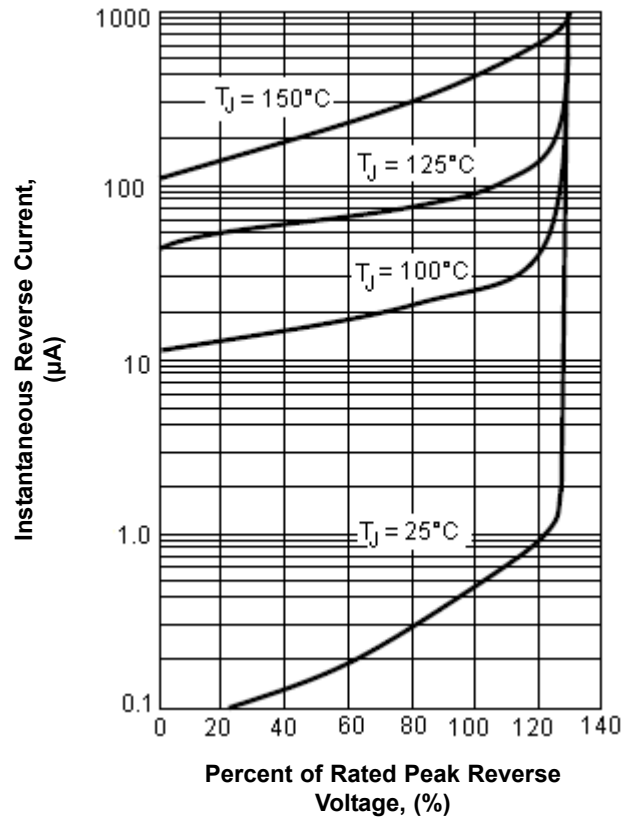


Rating and Characteristic Curves

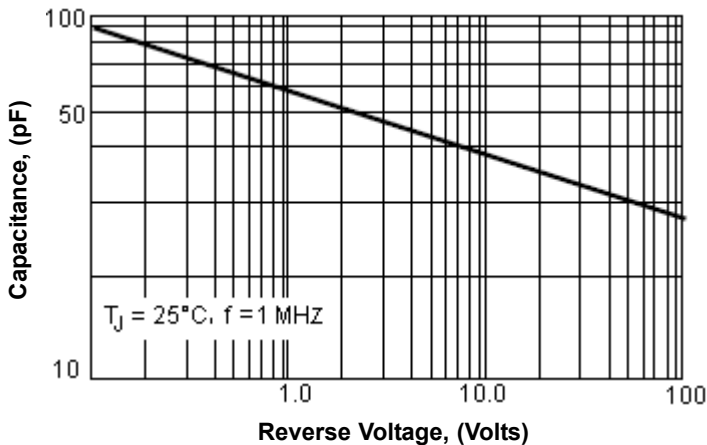
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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