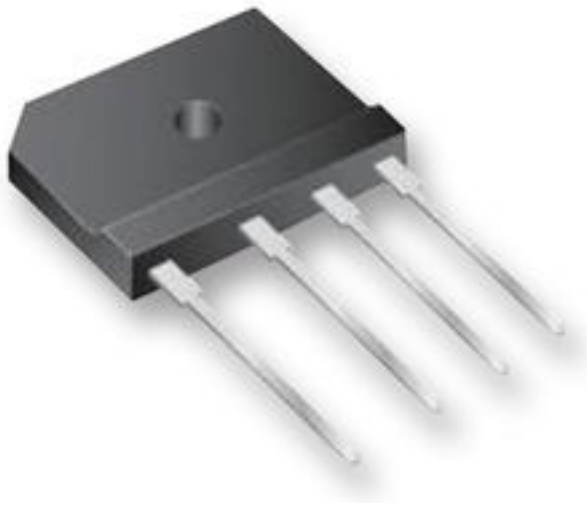


# Passivated Bridge Rectifiers

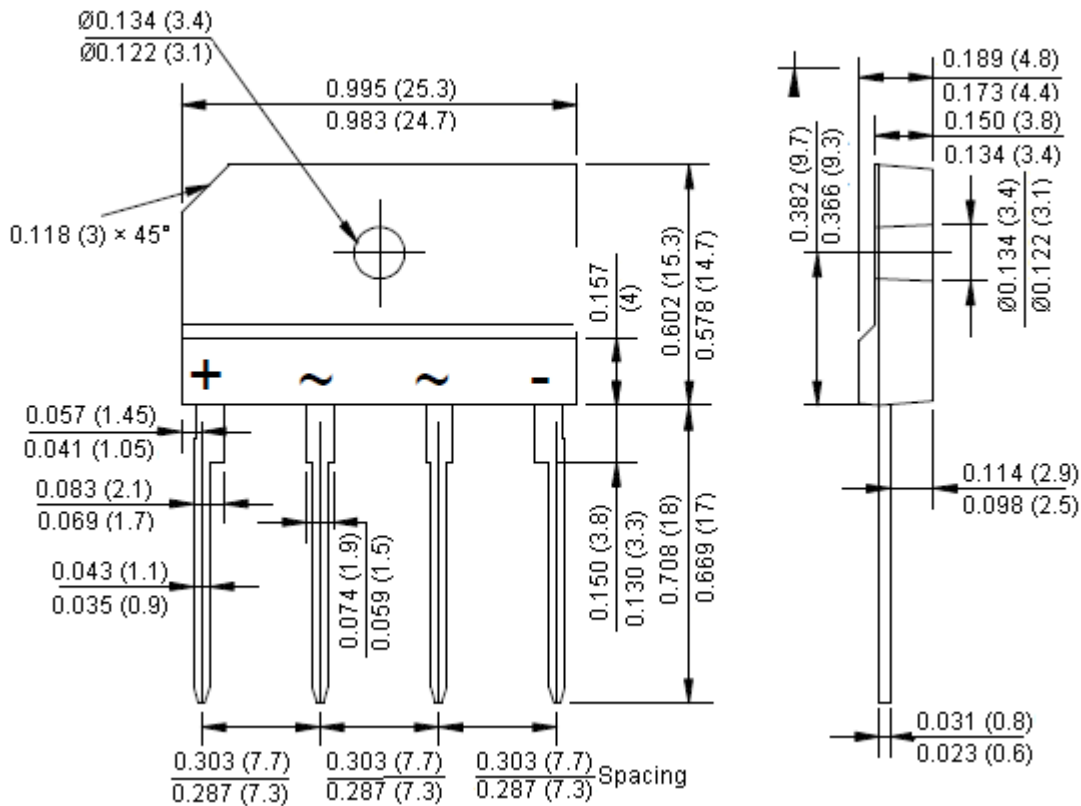


## Features:

- 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)



# Passivated Bridge Rectifiers



## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

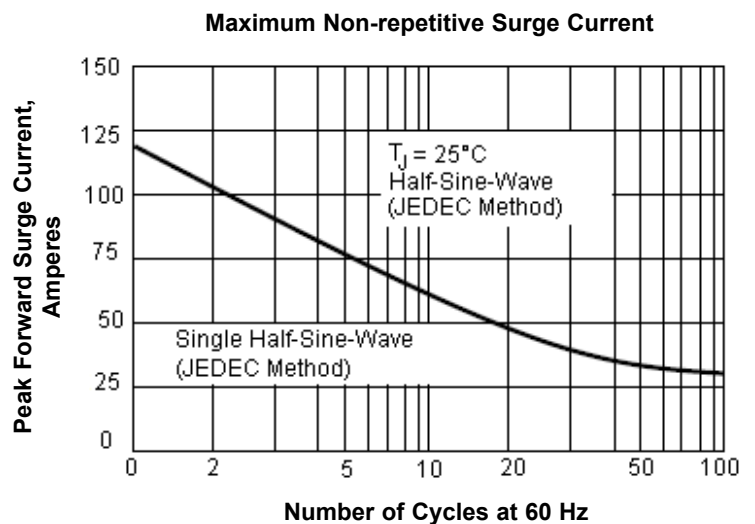
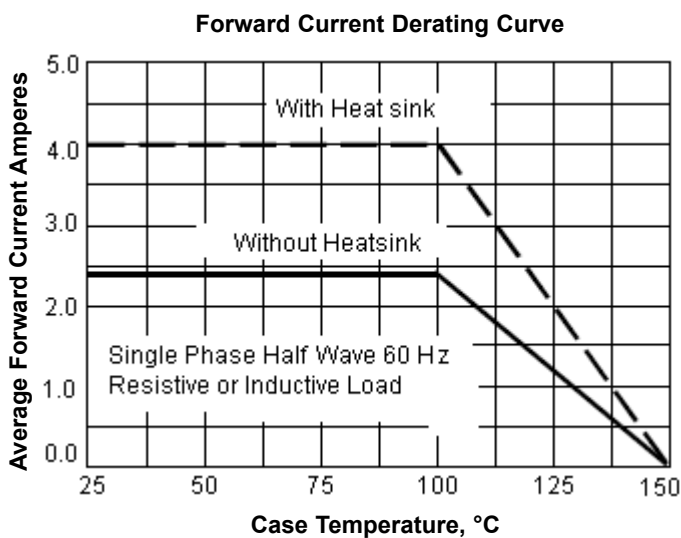
Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	VSIB440	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	400	V
Maximum RMS Voltage	$V_{RMS}$	280	
Maximum DC Blocking Voltage	$V_{DC}$	400	
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	$\mu\text{A}$
$I^2t$ Rating for Fusing ( $t < 8.3$ ms)	$I^2t$	93	$\text{A}^2\text{s}$
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

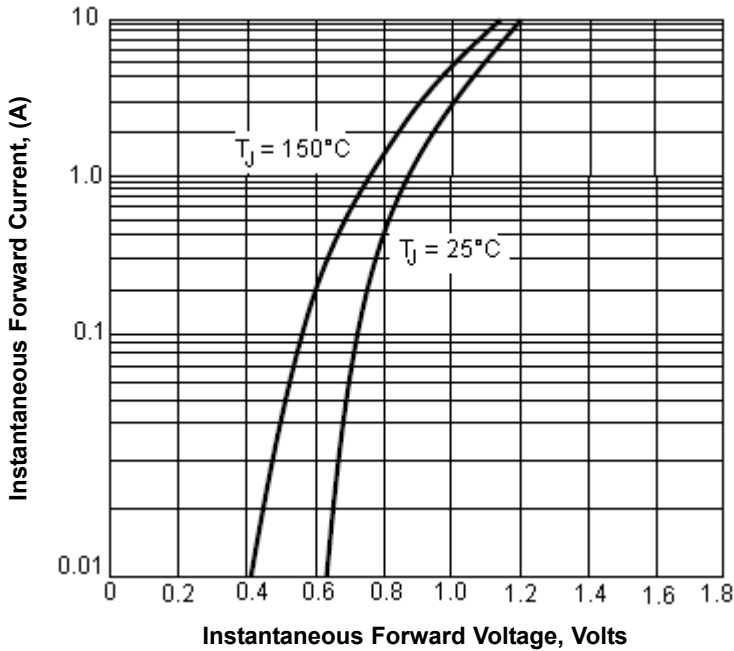


# Passivated Bridge Rectifiers

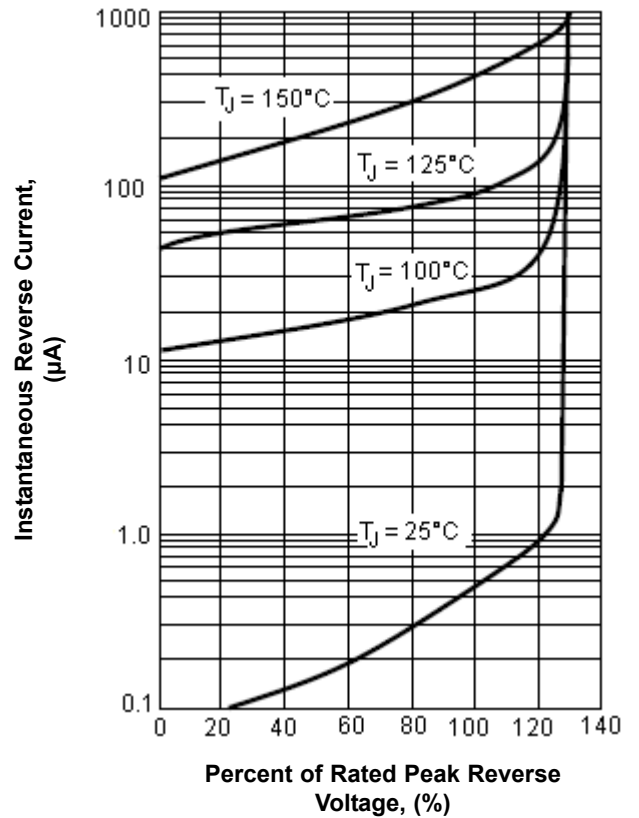


## Rating and Characteristic Curves

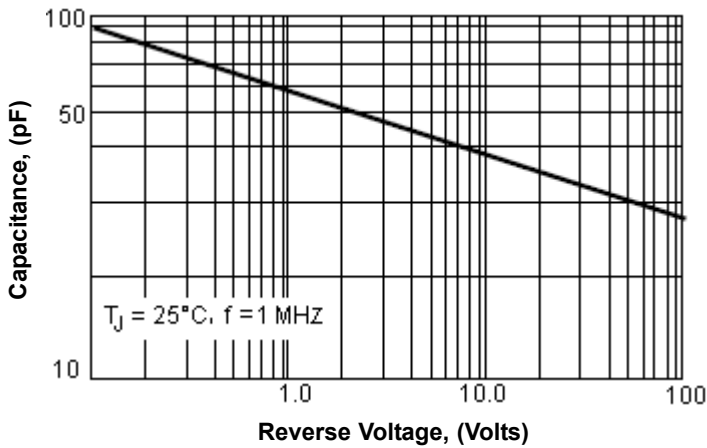
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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