# **Passivated Bridge Rectifiers**



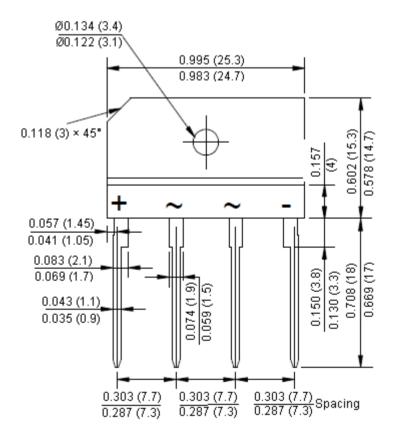


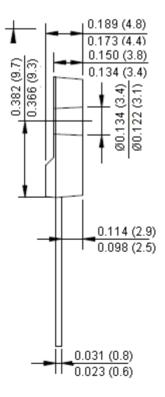
#### Features:

- 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**

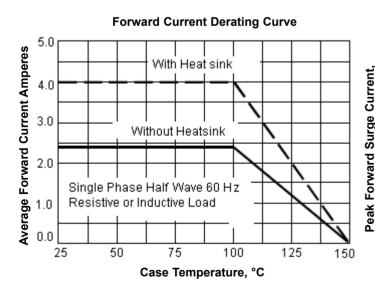
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

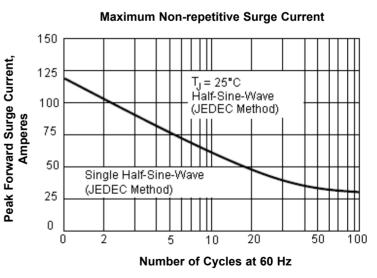
Characteristics	Symbol	VSIB420	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	140	
Maximum DC Blocking Voltage	V <sub>DC</sub>	200	
Maximum Average Forward (with heatsink Note 2) Rectified Current at $T_C = 100^{\circ}C$ (without heatsink)	I (AV)	4 2.4	A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	120	
Maximum Forward Voltage at 4 A dc	V <sub>F</sub>	1.1	V
Maximum DC Reverse Current at $T_J = 25^{\circ}$ C at Rated DC Blocking Voltage at $T_J = 125^{\circ}$ C	I <sub>R</sub>	10 500	μА
I <sup>2</sup> t Rating for Fusing (t < 8.3 ms)	l²t	93	A <sup>2</sup> s
Typical Junction Capacitance Per Element (Note 1)	CJ	45	pF
Typical Thermal Resistance	$R_{ heta JC}$	2.2	°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>		

 $\textbf{Notes}: \ \textbf{1}. \ \textbf{Measured} \ \textbf{at 1} \ \textbf{MHz} \ \textbf{and} \ \textbf{applied} \ \textbf{reverse} \ \textbf{voltage} \ \textbf{of 4} \ \textbf{V} \ \textbf{dc}.$ 

2. Device mounted on 50 × 50 × 1.6 mm Cu plate heatsink.

#### **Rating and Characteristic Curves**





www.element14.com www.farnell.com www.newark.com

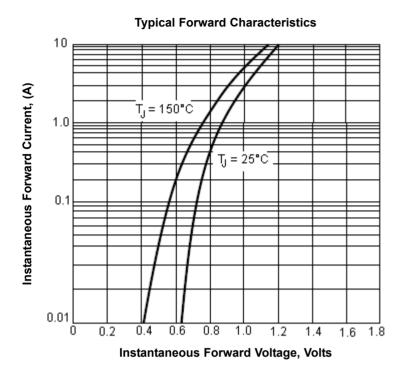


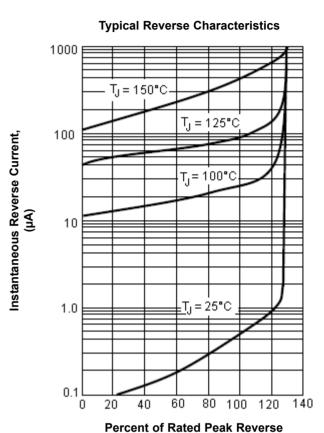
Page <2> 11/07/11 V1.1

## **Passivated Bridge Rectifiers**

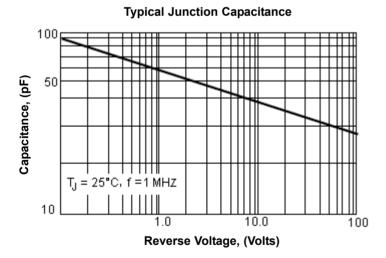


### **Rating and Characteristic Curves**





Voltage, (%)



Important Notice: This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell plc 2011.



