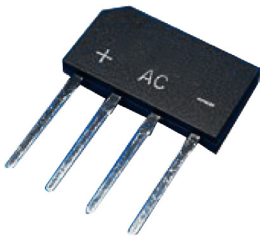
Passivated Bridge Rectifier

multicomp PRO

RoHS Compliant



Features

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

Specifications

Reverse Voltage : 1000 Volts
Forward Current : 4 Amperes

Maximum Ratings and Electrical Characteristics

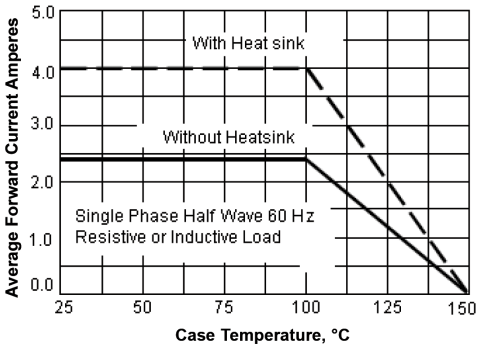
Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristics	Symbol	Values	Unit
Max. Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
Max. RMS Voltage	V_{RMS}	700	
Max. DC Blocking Voltage	V_{DC}	1000	
Max. Average Forward (with heatsink Note 2) Rectified Current at T_C = 100°C (without heatsink)	$I_{(AV)}$	4 2.4	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	120	
Max. Forward Voltage at 4 A DC	V_F	1.1	V
Max. DC Reverse Current at T_J = 25°C at Rated DC Blocking Voltage at T_J = 125°C	I_R	10 500	µA
I^2t Rating For Fusing (t < 8.3ms)	I^2t	93	A^2s
Typical Junction Capacitance per Element (Note 1)	C_J	45	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.2	°C / W
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}		

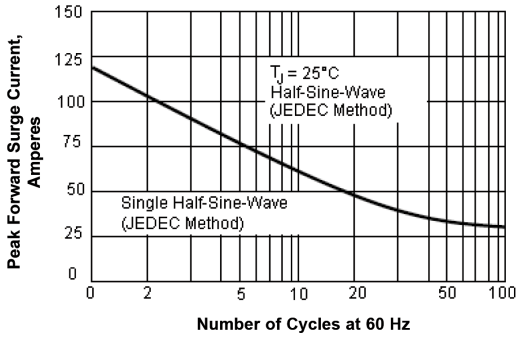
Note: 1. Measured at 1MHz and applied reverse voltage of 4 V DC
2. Device mounted on 50 × 50 × 1.6mm cu plate heatsink

Rating and Characteristic Curves

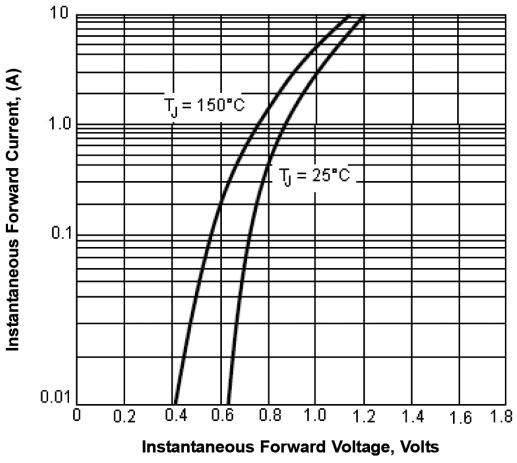
Forward Current Derating Curve



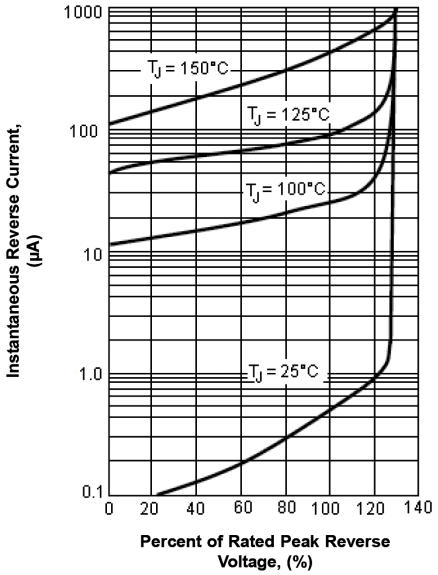
Maximum Non-repetitive Surge Current



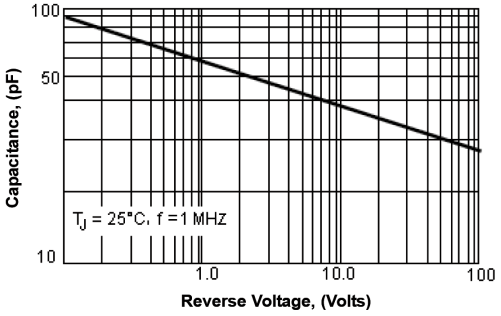
Typical Forward Characteristics



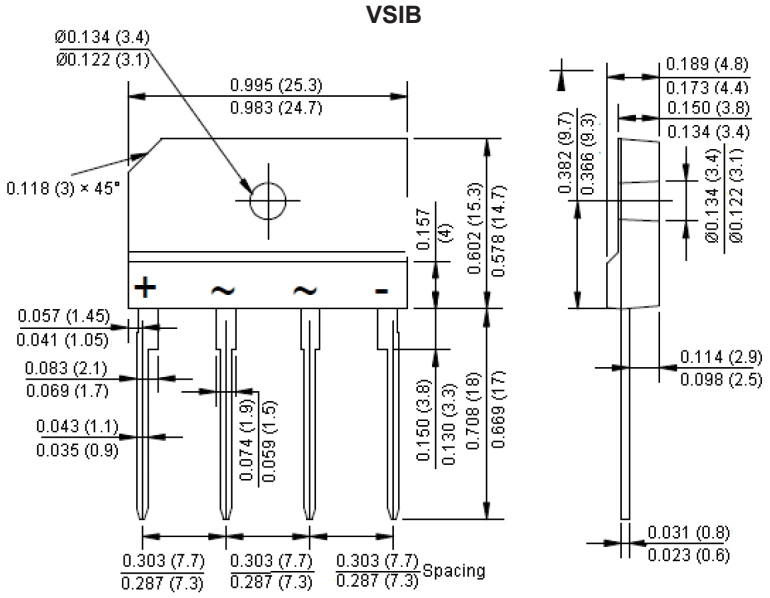
Typical Reverse Characteristics



Typical Junction Capacitance



Diagram



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Bridge Rectifier, 1000V, 4A	VSIB500