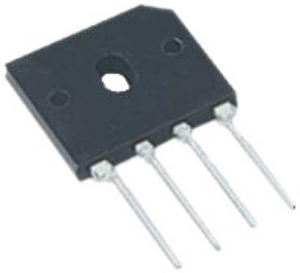
Bridge Rectifier Diode

multicomp PRO

RoHS Compliant



Features

- Ideal for printed circuit board
- Reliable low cost construction
- Plastic material
- High case dielectric strength of 1,500V_{RMS}
- Surge overload rating to 200 amperes peak
- High temperature soldering guaranteed: 260°C/10 seconds / 0.375 inch, (9.5mm) lead lengths

Mechanical Data

Case	: Molded plastic body
Terminals	: Plated leads solderable per MIL-STD-750, Method 2026
Weight	: 0.3 ounce, 8.0 grams
Mounting torque	: 5in. Maximum

Maximum Ratings and Electrical Characteristics

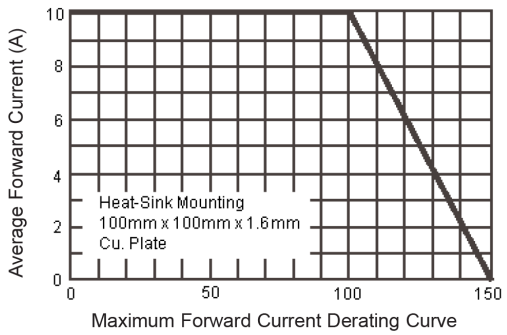
Rating at 25°C ambient temperature unless otherwise specified
Single phase, half wave, 60Hz, resistive or inductive load
For capacitive load, derate current by 20%

Characteristics	Symbol	Values	Units
Max. Recurrent Peak Reverse Voltage	V_{RRM}	400	V
Max. RMS Voltage	V_{RMS}	280	
Max. DC Blocking Voltage	V_{DC}	400	
Max. Average Forward Rectified Current at T_C = 100°C	$I_{(AV)}$	10	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	220	
Maximum Instantaneous Forward Voltage at 5.0A at 10A	V_F	1.0 1.1	V
Maximum DC Reverse Current at T_A = 25°C at Rated DC Blocking Voltage at T_A = 125°C	I_R	5.0 500	µA
Typical Junction Capacitance (Note 3)	C_J	221	pF
Typical Thermal Resistance Per Leg (Note 1) (Note 2)	$R_{\theta JA}$ $R_{\theta JC}$	21 2.0	°C/W
Operating Temperature Range	T_J	-50 to +150	°C
Storage Temperature Range	T_{STG}		

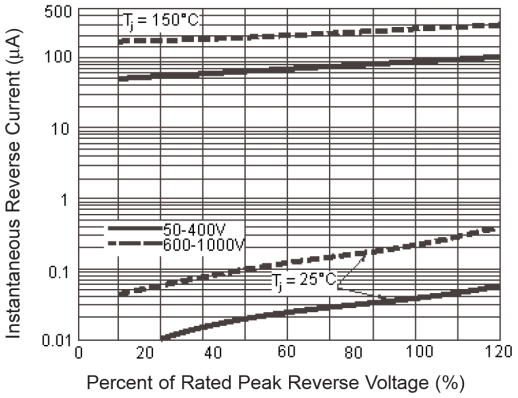
Notes 1: Units Mounted in Free Air No Heat Sink on PCB 0.5 × 0.5 inches (12mm × 12mm) Copper Pads, 0.375 inch (9.5mm) Lead Length.
2: Device Mounted on 4 x 6 x 0.25 inches Plate Heatsink
3. Measured at 1.0MHz and applied Reverse Voltage of 4.0V

Ratings and Characteristic Curves

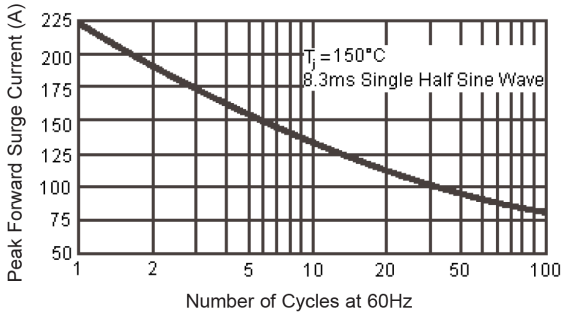
Maximum Forward Current Derating Curve



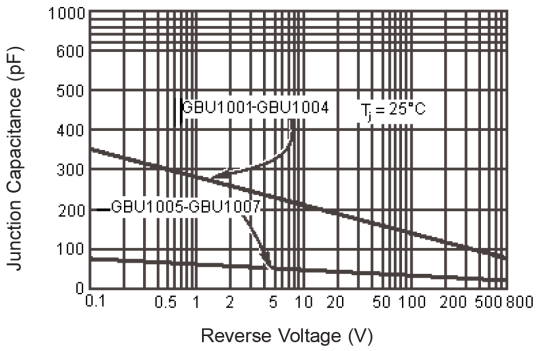
Typical Reverse Characteristics Per Bridge Element



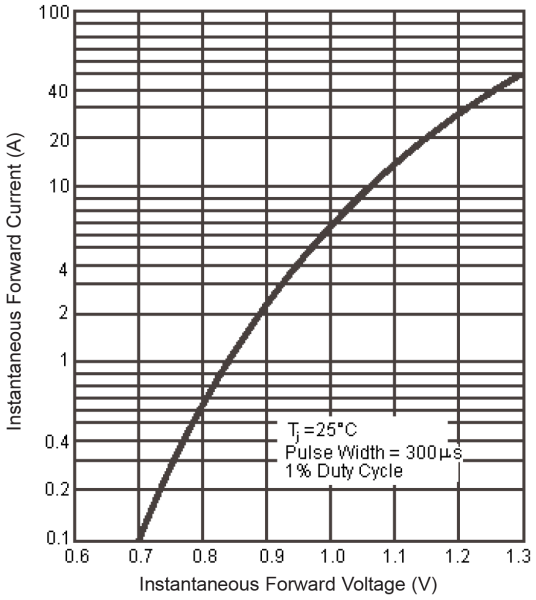
Maximum Non-Repetitive Forward Surge Current Per Bridge Element



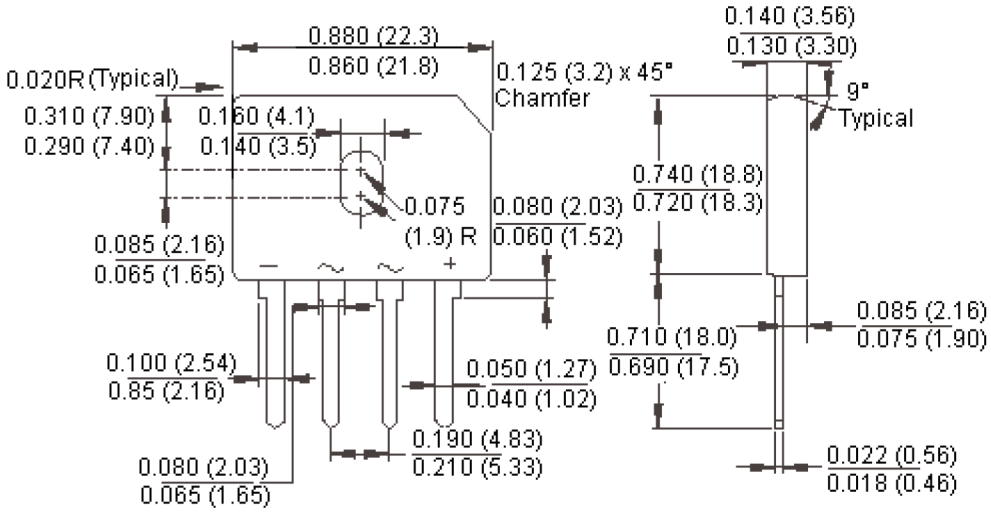
Typical Junction Capacitance



Typical Instantaneous Forward Characteristics Per Bridge Element



Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Bridge Rectifier, 10A, 400V	GBU1004+