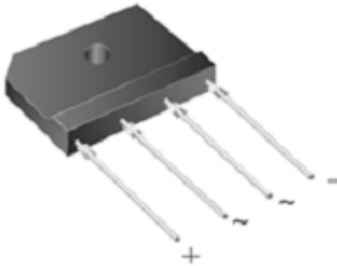


EDCON-COMPONENTS

Glass Passivated Single-Phase Bridge Rectifiers Reverse Voltage 50 to 1000 Volts
Forward Current 6.0 Amperes



GBJ6AU thru
GBJ6MU



- Thin Single In-Line package
- Ideal for printed circuit boards
- Glass passivated chip junction
- High surge current capability
- High case dielectric strength of 2500 V_{RMS}
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	GBJ6AU	GBJ6BU	GBJ6DU	GBJ6GU	GBJ6JU	GBJ6KU	GBJ6MU	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified output current at $T_C=100^\circ\text{C}$ $T_A=25^\circ\text{C}$	$I_{F(AV)}$				6.0 ⁽¹⁾				Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}				180				Amps
Rating for fusing ($t < 8.3\text{ms}$)	I_t				120				A ² sec
Maximum instantaneous forward voltage drop per leg at 3.0A	V_F				1.0				Volt
Maximum DC reverse current at rated DC blocking voltage per leg $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R				5				μA
Typical thermal resistance per leg	$R_{\theta JA}$ $R_{\theta JC}$				22 ⁽²⁾				$^\circ\text{C/W}$
Dielectric strength (Terminals to case, AC 1 minute)	V_{EO}				2500				Volts
Operating junction and storage temperature range	T_J, T_{STG}				-55 to +150				$^\circ\text{C}$

Notes:

1. Unit case mounted on 9.5x9.5x0.15cm thick Al plate heatsink
2. Units mounted on P.C.B. with 0.5 x 0.5" (13 x 13 mm) copper pads and 0.375" (9.5 mm) lead length
3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw

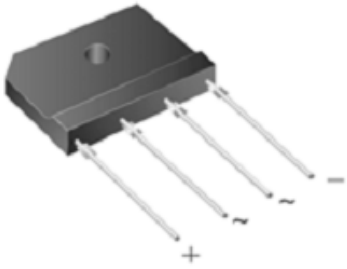
Typical Applications

General purpose use in ac-to-dc bridge full wave rectification for
Switching Power Supply, Home Appliances, Office Equipment,
Industrial Automation applications

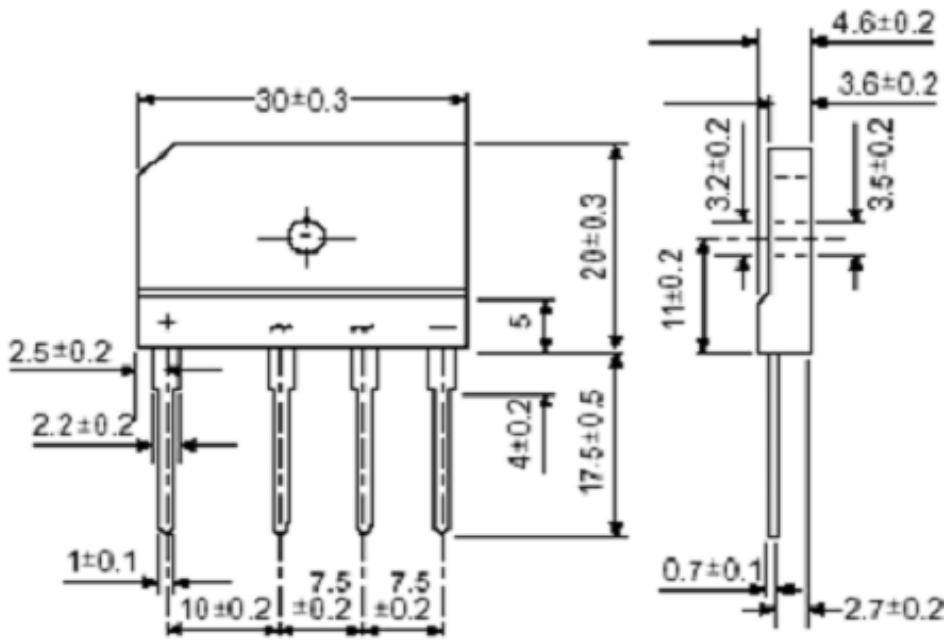
Single In Line higher peak forward current

EDCON-COMPONENTS

Glass Passivated Single-Phase Bridge Rectifiers Reverse Voltage 50 to 1000 Volts
Forward Current 6.0 Amperes



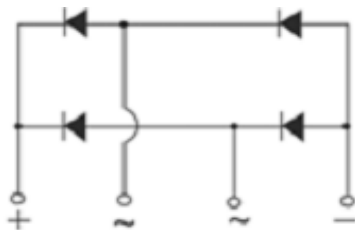
Technical Drawing



Dimensions in millimeter

Mechanical Data

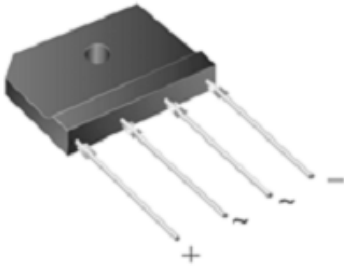
- Case: GBJ(5S) Epoxy meets UL-94V-0 Flammability rating
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- High temperature soldering guaranteed: 260 °C/10 seconds, 0.375 (9.5mm) lead length, 5lbs.(2.3kg) tension
- Polarity: As marked on body
- Mounting Torque: 10 cm·kg (8.8 inches·lbs) max.
- Recommended Torque: 5.7cm·kg (5 inches·lbs)



Single In Line higher peak forward current

EDCON-COMPONENTS

Glass Passivated Single-Phase Bridge Rectifiers Reverse Voltage 50 to 1000 Volts
Forward Current 6.0 Amperes



Ratings and characteristic curve

($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

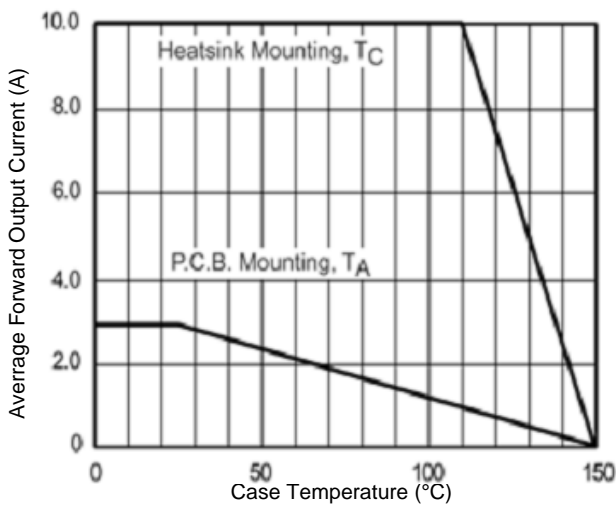


Figure 1. Derating Curve Output Rectified Current

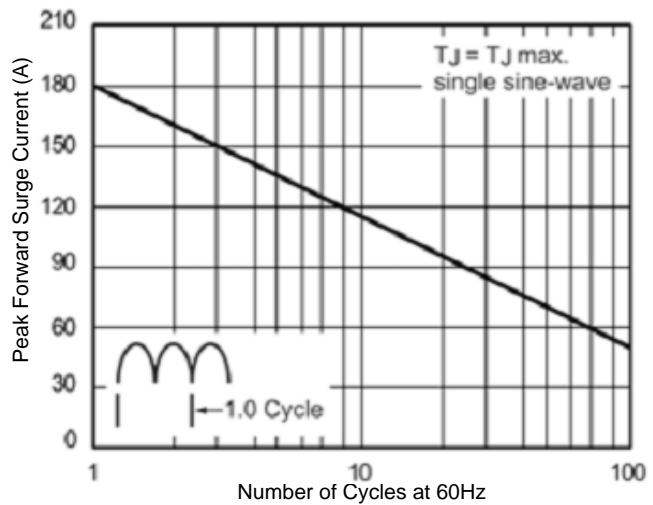


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

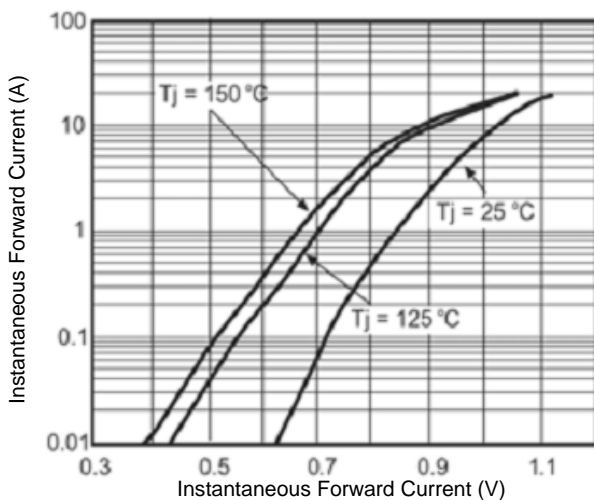


Figure 3. Typical Forward Characteristics Per Leg

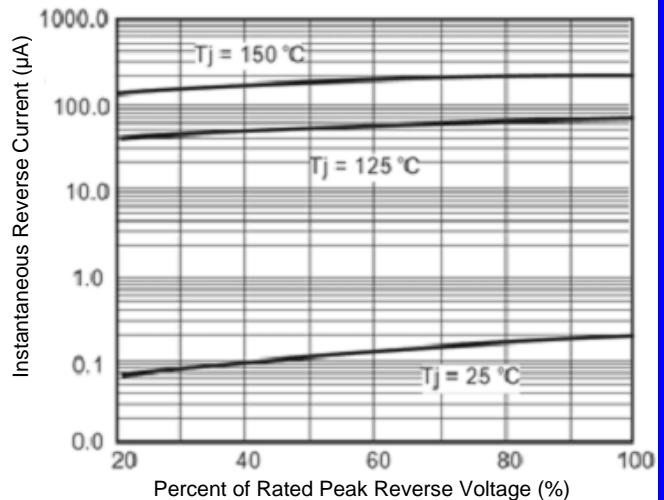


Figure 4. Typical Reverse Characteristics Per Leg

Single In Line higher peak forward current

EDCON-COMPONENTS

Glass Passivated Single-Phase Bridge Rectifiers Reverse Voltage 50 to 1000 Volts
Forward Current 6.0 Amperes

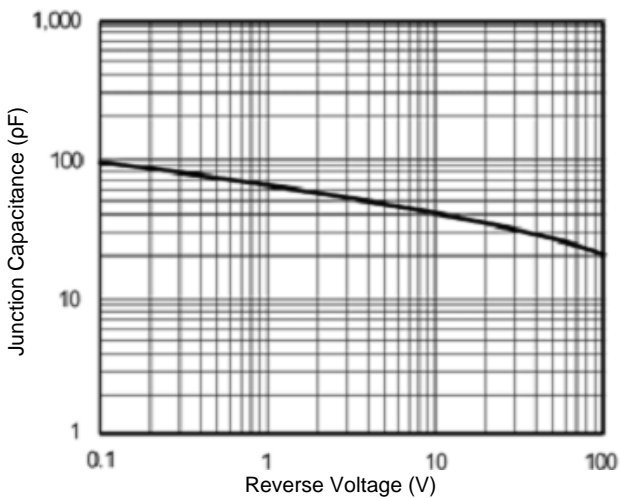
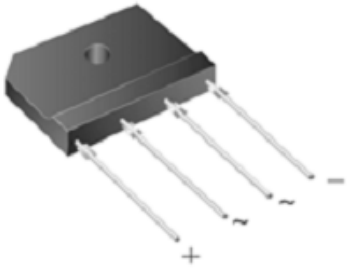


Figure 5. Typical Junction Capacitance Per Leg

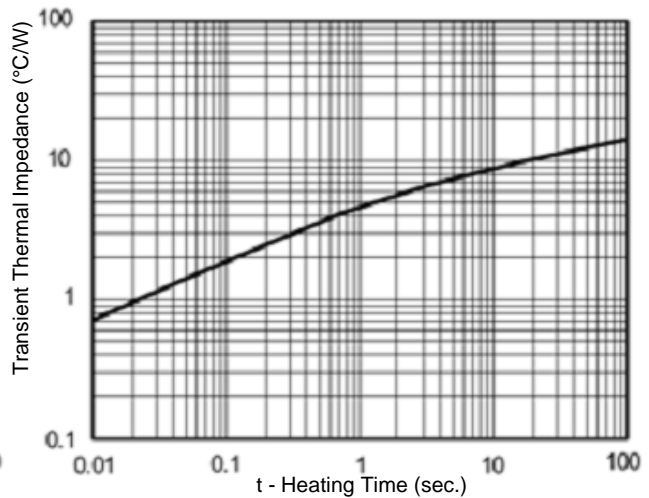


Figure 6. Typical Transient Thermal Impedance

Single In Line higher peak forward current

Ordering Information

Serie					
E13002	GBJA6	TU			
	GBJ6AU	TR = Tape reel			
	GBJ6BU				
	GBJ6DU	TU = Tube			
	GBJ6GU				
	GBJ6JU				
	GBJ6KU				
	GBJ6MU				

