

### Bridge Rectifier

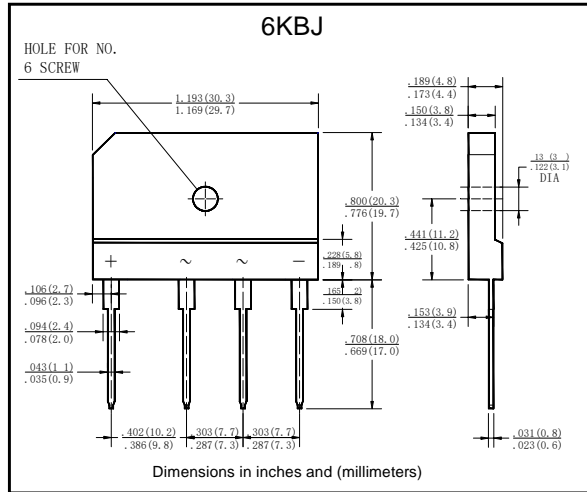
#### ■ Features

- $I_o$  20A
- $V_{RRM}$  50V~1000V
- Glass passivated chip
- High surge forward current capability

#### ■ Applications

- General purpose 1 phase Bridge rectifier applications

### ■ Outline Dimensions



### ■ Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	GBJ20						
				005	01	02	04	06	08	10
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		50	100	200	400	600	800	1000
Average Rectified Output Current	$I_o$	A	60Hz sine wave, R-load	With heatsink $T_c=100^\circ\text{C}$						
				Without heatsink $T_a=25^\circ\text{C}$						
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	60Hz sine wave, 1 cycle, $T_j=25^\circ\text{C}$	240						
Current Squared Time	$I^2t$	A <sup>2</sup> S	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$ , Rating of per diode	240						
Storage Temperature	$T_{stg}$	$^\circ\text{C}$		-55 ~ +150						
Junction Temperature	$T_j$	$^\circ\text{C}$		-55 ~ +150						
Dielectric Strength	$V_{dis}$	KV	Terminals to case. AC 1 minute	2.5						
Mounting Torque	Tor	kg · cm	Recommend torque: 5kg · cm	8						

### ■ Electrical Characteristics ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	$V_{FM}$	V	$I_{FM}=10.0\text{A}$ , Pulse measurement, Rating of per diode	1.05
Peak Reverse Current	$I_{RRM}$	uA	$V_{RM}=V_{RRM}$ , Pulse measurement, Rating of per diode	10
Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	Between junction and ambient, Without heatsink	20
	$R_{\theta J-C}$		Between junction and case, With heatsink	0.8

## Characteristics(Typical)

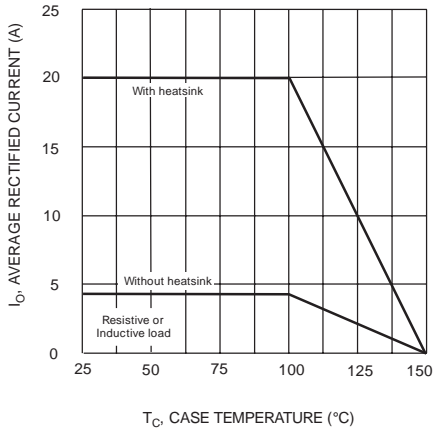


Fig. 1 Forward Current Derating Curve

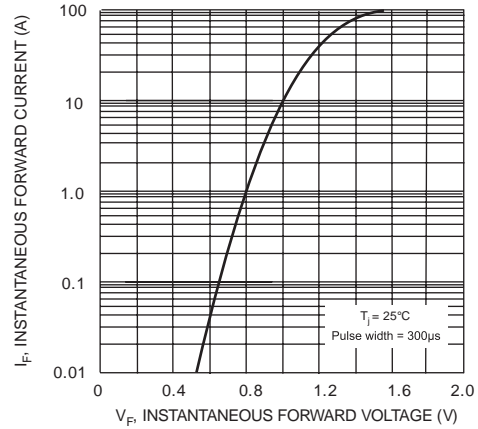


Fig. 2 Typical Forward Characteristic (per element)

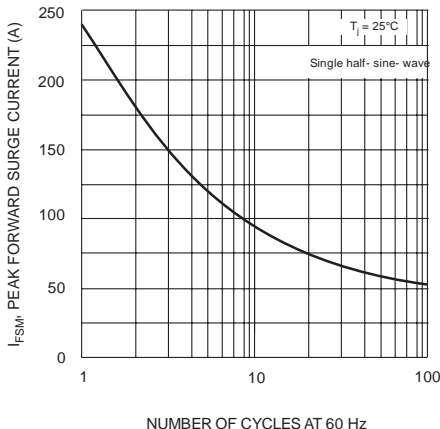


Fig. 3 Maximum Non- Repetitive Surge Current

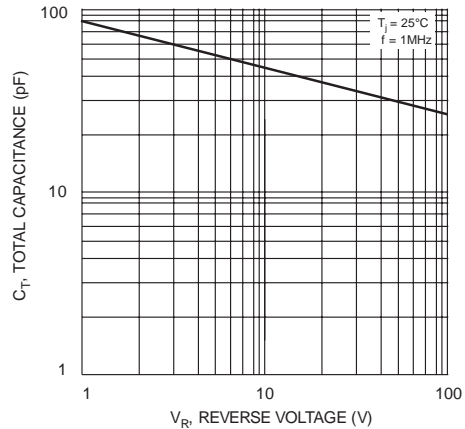


Fig. 4 Typical Total Capacitance, Per Element

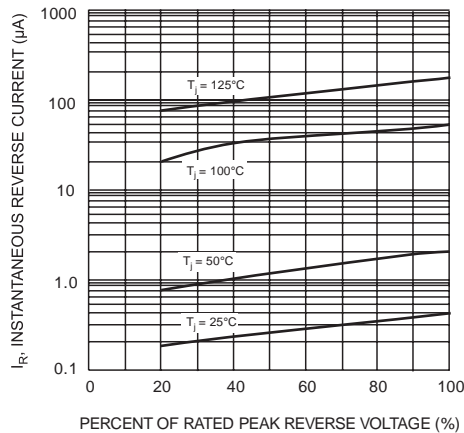


Fig. 5 Typical Reverse Characteristics