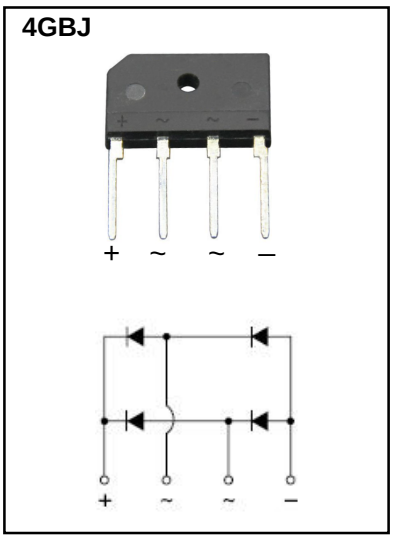
KBJ6005 thru KBJ610

4GBJ Plastic-Encapsulate Bridge Rectifier

Features

- I_O 6.0A
- VRRM 50V-1000V
- High surge current capability



Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- K BJ6XX

XX：From 005 To 10

Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions		KBJ 6						
					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℃	6						
				Without heatsink T_c =100℃	2.8						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz sine wave, 1 cycle, T_j=25℃		175						
Current Squared Time	I^2t	A^2S	1ms≤t<8.3ms Tj=25℃， Rating of per diode		127						
Storage Temperature	T_{stg}	℃			-55 ~+150						
Junction Temperature	T_j	℃			-55 ~+150						

Electrical Characteristics（T_a=25℃ Unless otherwise specified）

Item	Symbol	Unit	Test Condition		Max
Peak Forward Voltage	V_{FM}	V	I_{FM}=3A, Pulse measurement, Rating of per diode		1.0
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	T_a=25℃	10
	I_{RRM2}			T_a=125℃	500
Thermal Resistance	$R_{\theta J-A}$	℃/W	Between junction and ambient, Without heatsink		26
	$R_{\theta J-C}$		Between junction and case, With heatsink		3.4

Typical Characteristics

Fig. 1 - Forward Current Derating Curve

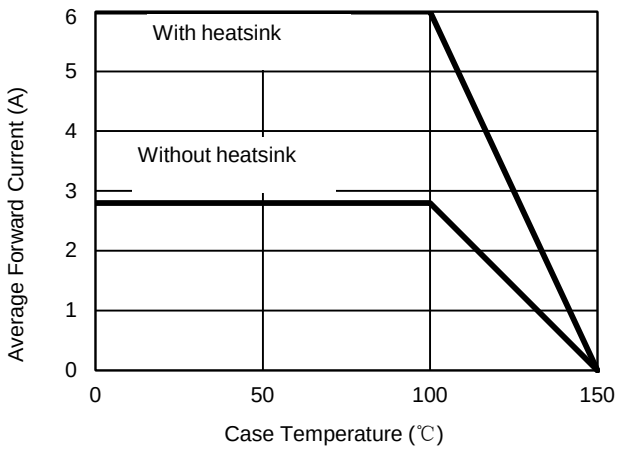


Fig. 2 - Maximum Non-Repetitive Surge Current

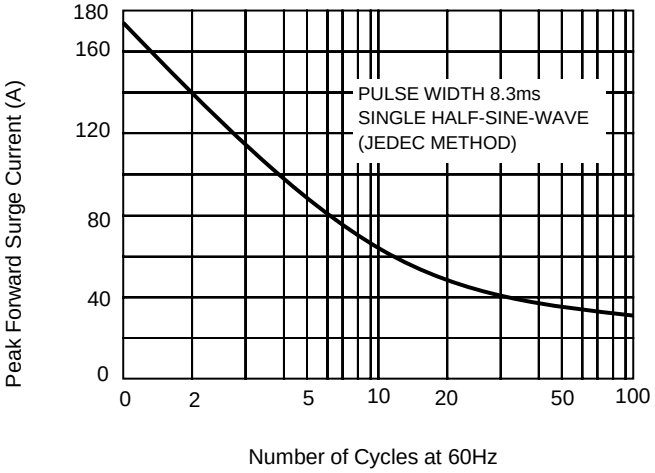


Fig. 3 - Typical Reverse Characteristics

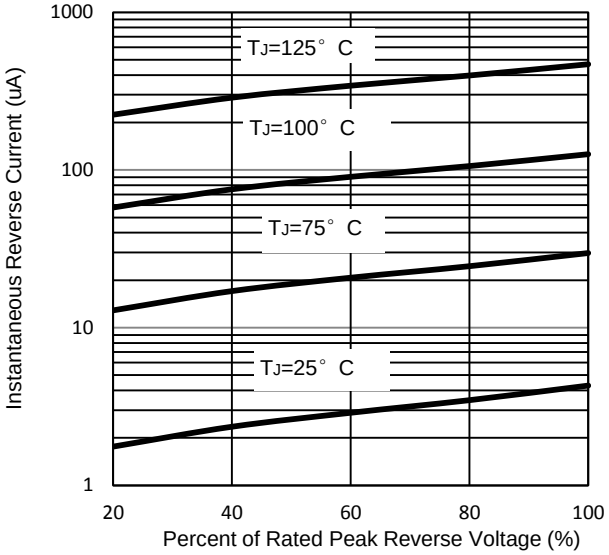


Fig. 4 - Typical Forward Characteristics

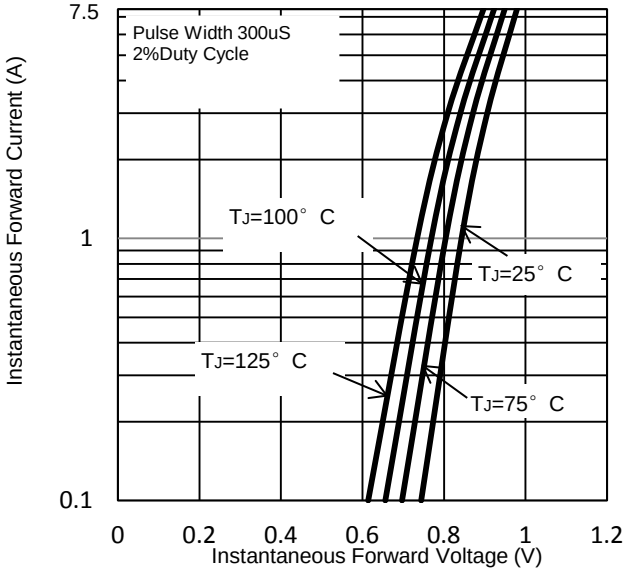
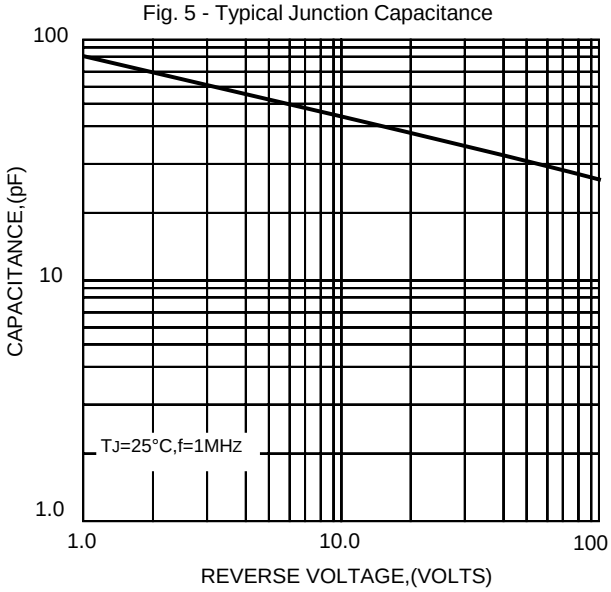


Fig. 5 - Typical Junction Capacitance



4GBJ Package Outline Dimensions