



6GBJ Plastic-Encapsulate Bridge Rectifier

GBJ15005 THRU GBJ1510

General Purpose Bridge Rectifier

Features

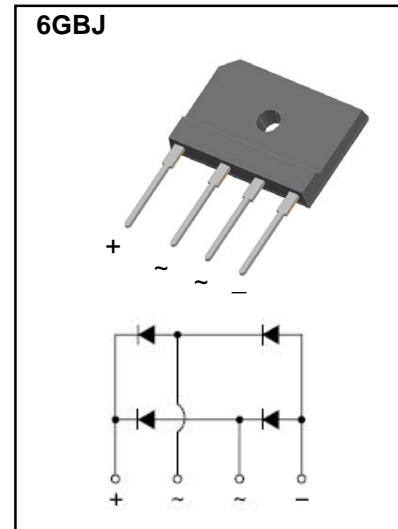
- I_o 15A
- V_{RRM} 50V-1000V
- High surge current capability
- Glass passivated chip

Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- GBJ15XX
- XX : From 005 To 10



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	GBJ15						
				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°C						
				Without heatsink T _a =25°C						
Surge(Non-repetitive)Forward Current	I _{FSM}	A	60Hz sine wave, 1 cycle, T _j =25°C	240						
Current Squared Time	I ² t	A ² S	1ms≤t<8.3ms T _j =25°C, Rating of per diode	239						
Storage Temperature	T _{stg}	°C		-55 ~+150						
Junction Temperature	T _j	°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°C Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	V _{FM}	V	I _{FM} =7.5A, Pulse measurement, Rating of per diode	1.0
Peak Reverse Current	I _{RRM}	μ A	V _{RM} =V _{RRM} , Pulse measurement, Rating of per diode	10
Thermal Resistance	R _{θ J-A}	°C/W	Between junction and ambient, Without heatsink	22
	R _{θ J-C}		Between junction and case, With heatsink	1.5

Typical Characteristics

FIG.1-MAXIMUM FORWARD SURGE CURRENT

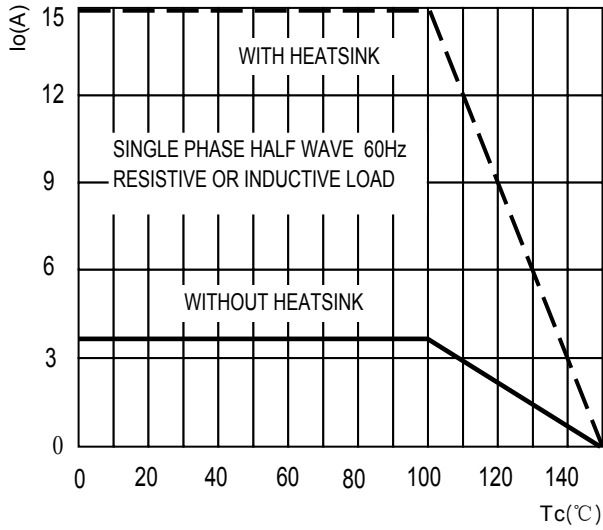


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

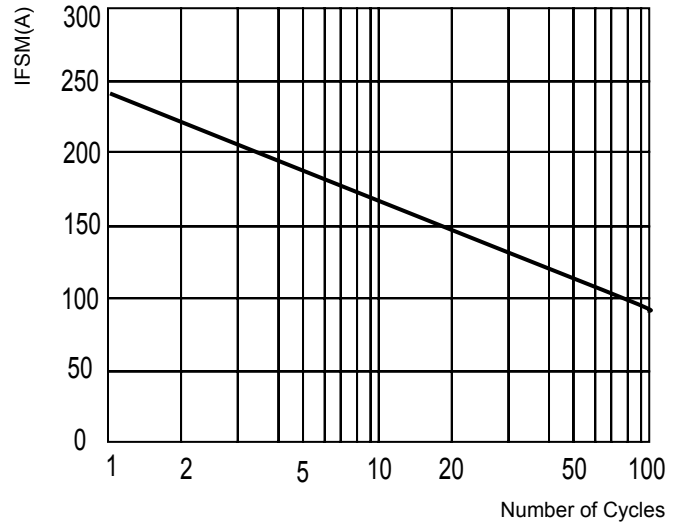


FIG.3-TYPICAL FORWARD CHARACTERISTICS

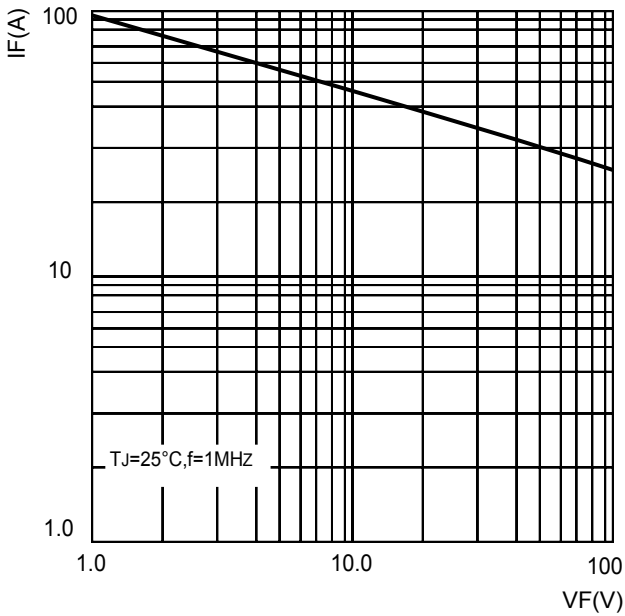


FIG.4-TYPICAL REVERSE CHARACTERISTICS

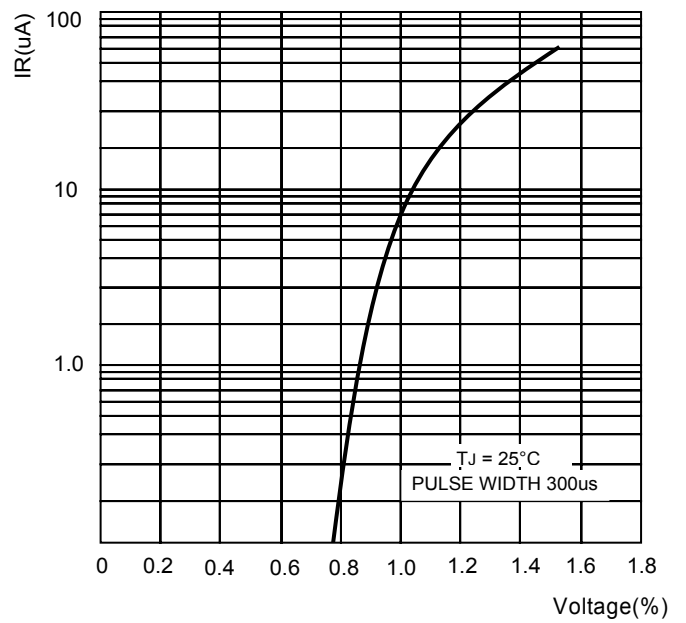
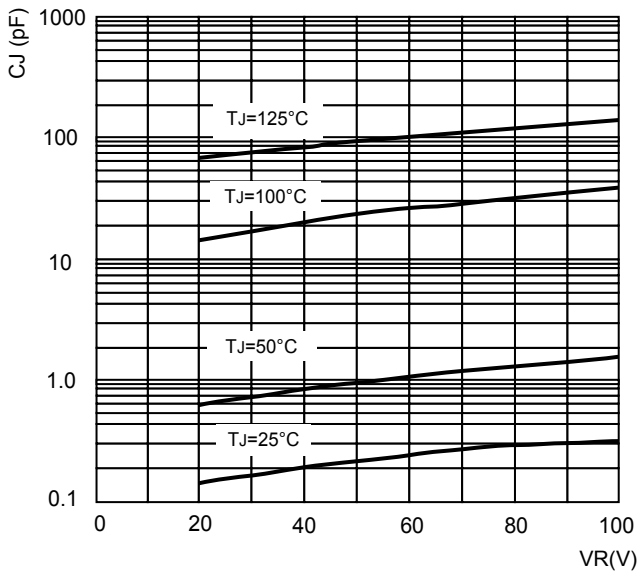
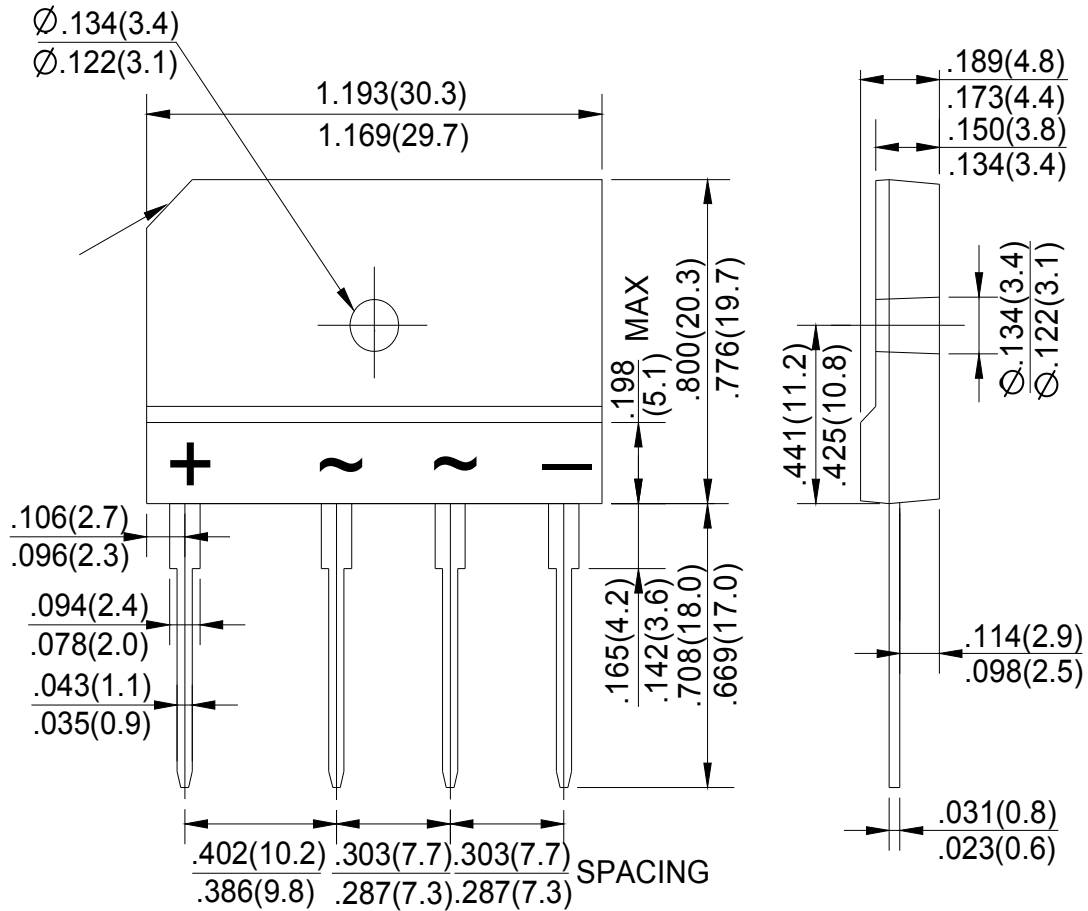


FIG.5-TYPICAL JUNCTION CAPACITANCE



6GBJ Package Outline Dimensions



Dimensions in inches and (millimeters)

NOTICE

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