

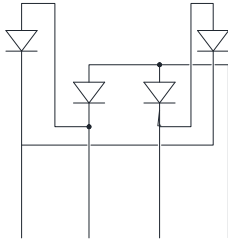
Low VF Bridge Rectifiers

Features

- UL recognition, file #E230084
- Glass passivated chip junction
- Thin single in-line package
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.



Mechanical Data

- Package:** 6KBJ
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity:** As marked on body

Maximum Ratings (T_a=25 Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GBJL5006	
Device marking code			GBJL5006	
Maximum Repetitive Peak Reverse Voltage	VRRM	V	600	
Maximum RMS Voltage	VRMS	V	420	
Maximum DC blocking Voltage	VDC	V	600	
Average rectified output current @60Hz sine wave, R-load	With heatsink T _c =55	I _O	A	50.0
	Without heatsink T _a =25			3.5
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T _j =25	IFSM	A	500	
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25			1000	
Current squared time @1ms t 8.3ms T _j =25, Rating of per diode	I ² t	A ² S	1037.5	
Storage temperature	T _{stg}		-55 ~ +150	
Junction temperature	T _j		-55 ~ +150	
Dielectric strength @ Terminals to case, AC 1 minute	V _{dis}	KV	2.5	
Mounting torque @Recommend torque 5kg cm	T _{or}	kg cm	8	



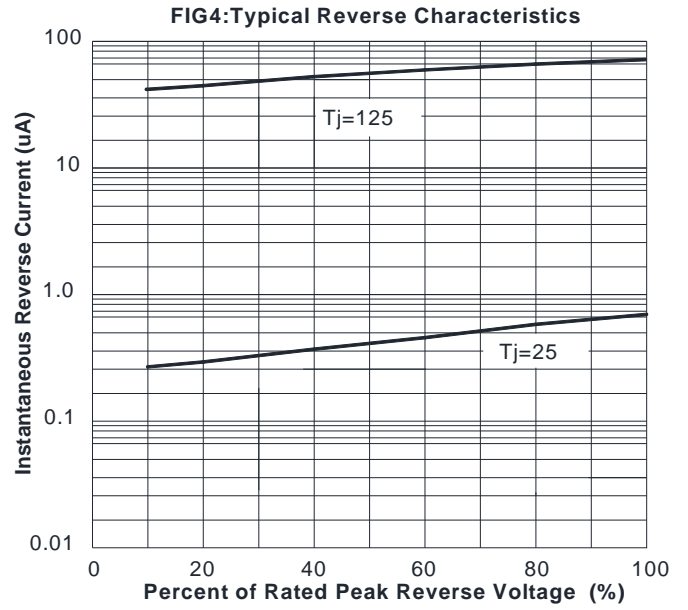
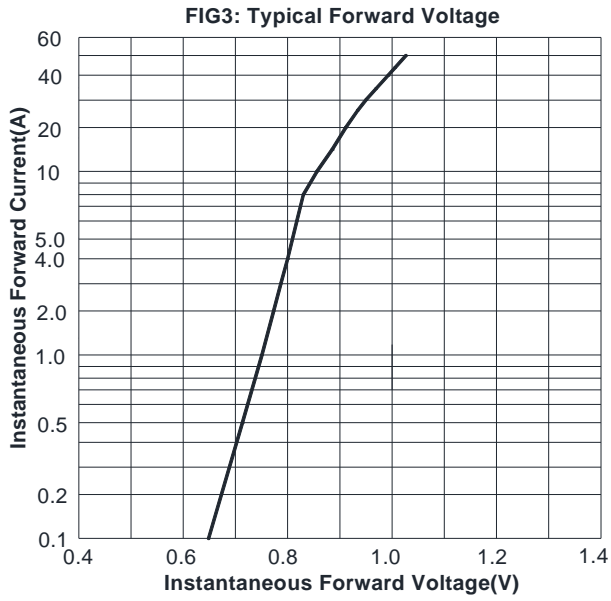
GBJL5006

Electrical Characteristics $T_a=25$ Unless otherwise specified

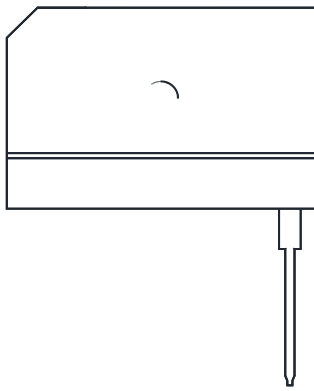
PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBJL5006
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=25A$	0.97
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	$T_j=25$	5
			$T_j=125$	200
Typical junction capacitance	C_j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	280

Thermal Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	GBJL5006
Typical Thermal Resistance Between junction and ambient, Without heatsink	R J-A	$^{\circ}W$	18.0



Outline Dimensions



Dimensions in millimeters

6KBJ		
Dim	Min	Max
A	29.7	30.3
B	19.7	20.3
C	17.0	18.0
D	4.8	5.8
E	3.8	4.2
F	7.3	7.7
G	9.8	10.2
H	0.9	1.1
I	2.0	2.4
J	2.3	2.7
K	3.4	3.8
L	4.4	4.8
M	10.8	11.2
N	3.1	3.7
O	3.1	3.4
P	0.6	0.8



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