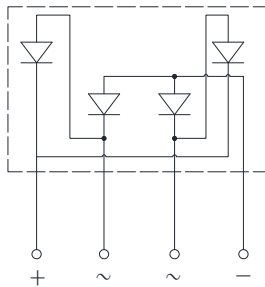
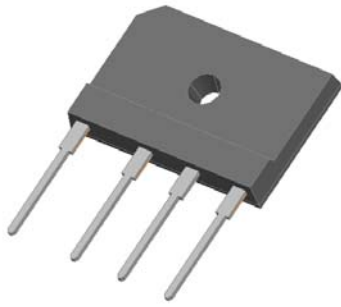


Bridge Rectifiers



Features

- UL recognition, file #E230084
- 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 high frequency 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°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBJ25005F	GBJ2501F	GBJ2502F	GBJ2504F	GBJ2506F	GBJ2508F	GBJ2510F
Device marking code				GBJ25005F	GBJ2501F	GBJ2502F	GBJ2504F	GBJ2506F	GBJ2508F	GBJ2510F
Repetitive peak reverse voltage		VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load,	With heatsink T _C =87℃	I _O	A	25						
	Without heatsink T _A =25℃			3.5						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T _J =25℃		IFSM	A	350						
Current squared time @1ms≤t≤8.3ms T _J =25℃, Rating of per diode		I ² t	A ² s	508						
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		Tor	kg · cm	8						

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBJ25005F	GBJ2501F	GBJ2502F	GBJ2504F	GBJ2506F	GBJ2508F	GBJ2510F
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =12.5A	1.3						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RM} =V _{RRM}	10						
Reverse Recovery Time	T _{rr}	ns	I _F =0.5A I _{RM} =1A I _{RR} =0.25A	150				250	500	



GBJ25005F THRU GBJ2510F

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

PARAMETER		SYMBOL	UNIT	GBJ25005F	GBJ2501F	GBJ2502F	GBJ2504F	GBJ2506F	GBJ2508F	GBJ2510F
Thermal Resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	22						
	Between junction and case, With heatsink	$R_{\theta J-C}$		1.0						

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBJ25005F THRU GBJ2510F	B1	Approximate 6.5	15	750	1500	TUBE
GBJ25005F THRU GBJ2510F	A1	Approximate 6.5	250	250	2000	BOX

■ Characteristics (Typical)

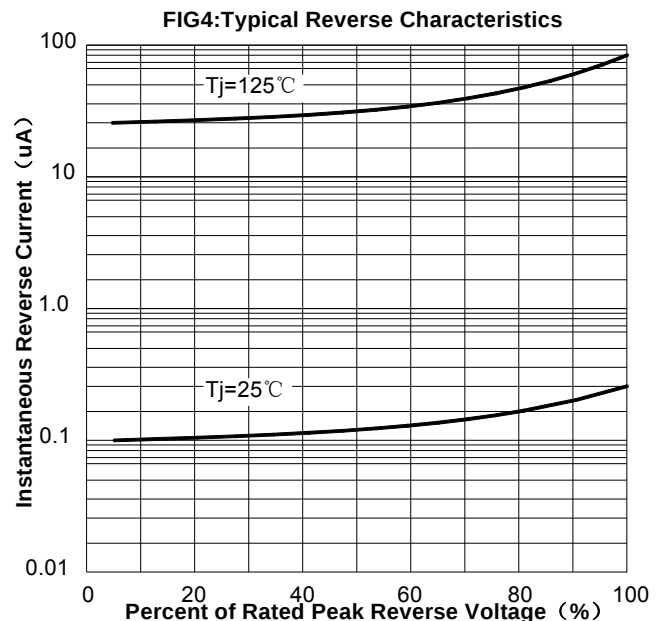
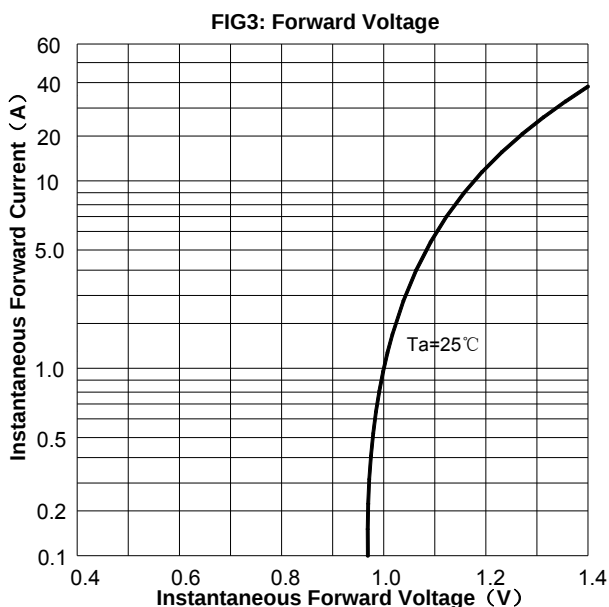
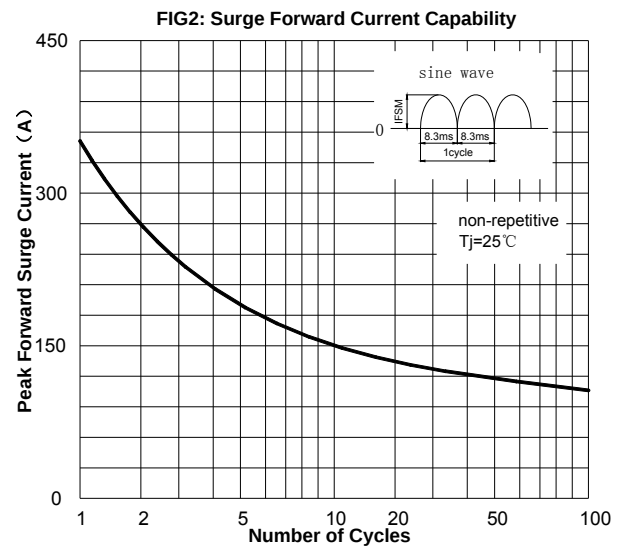
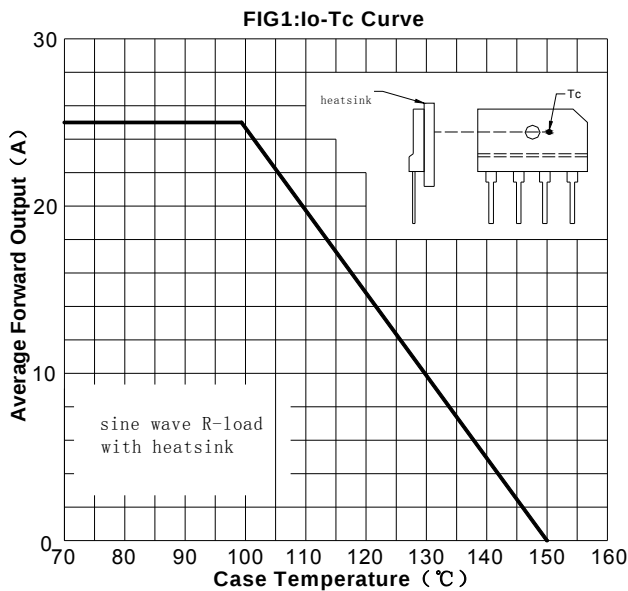
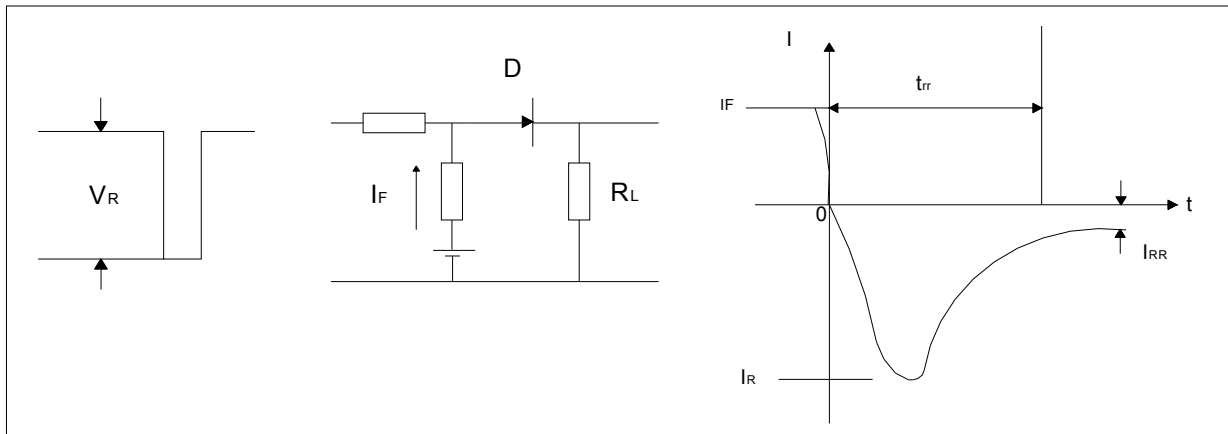
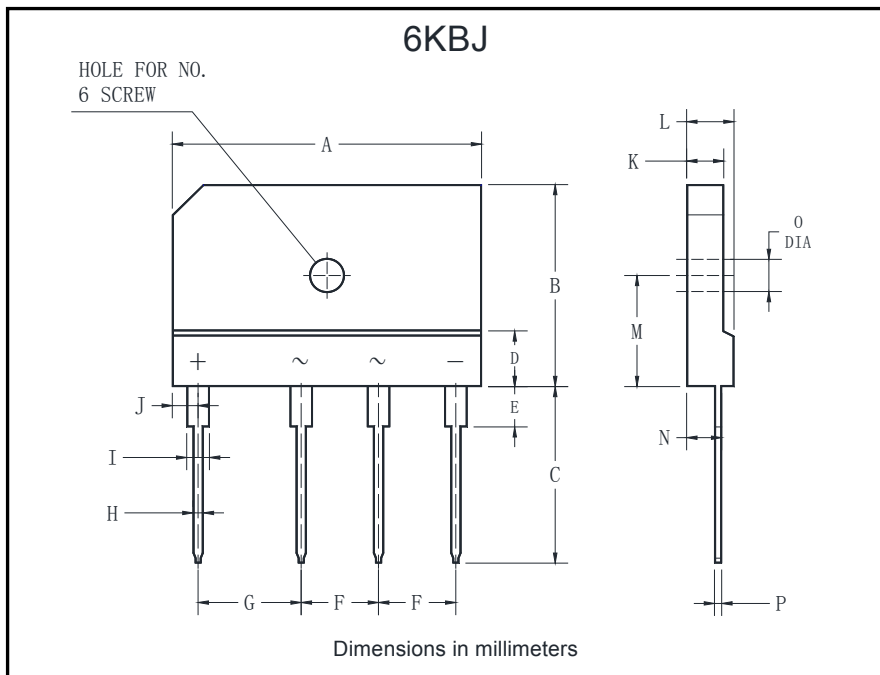


图5: 反向恢复时间试验电路及测试波形示意图
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ Outline Dimensions



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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