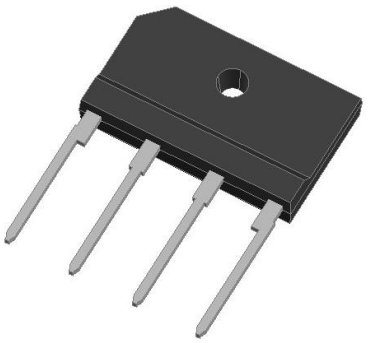
RoHS COMPLIANT



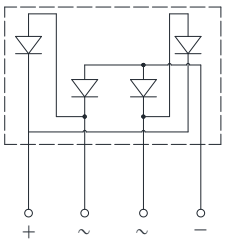
Bridge Rectifiers

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



Mechanical Data

- **Package**: 4KBJ
  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	KBJ6005	KBJ601	KBJ602	KBJ604	KBJ606	KBJ608	KBJ610
Device marking code				KBJ6005	KBJ601	KBJ602	KBJ604	KBJ606	KBJ608	KBJ610
Repetitive Peak Reverse Voltage		V_{RRM}	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load,	With heatsink T_c =110℃	I_O	A	6.0						
	Without heatsink T_a =25℃			2.8						
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, Tj=25℃		I_{FSM}	A	150						
Current squared time @1ms≤t≤8.3ms Tj=25℃,rating of per diode		I^2t	A^2S	93						
Storage Temperature		Tstg	℃	-55 ~+150						
Junction Temperature		Tj	℃	-55 ~+150						
Dielectric strength @ terminals to case, AC 1 minute		Vdis	KV	2						
Mounting torque @recommend torque：5kg • cm		Tor	kg • cm	8						

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBJ6005	KBJ601	KBJ602	KBJ604	KBJ606	KBJ608	KBJ610
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=3.0A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM}	μA	V_{RM}=V_{RRM}	5						

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	KBJ6005	KBJ601	KBJ602	KBJ604	KBJ606	KBJ608	KBJ610
Thermal Resistance	Between junction and ambient, Without heatsink	RθJ-A	℃/W	26.0						
	Between junction and case, With heatsink	RθJ-C		3.4						

■Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
KBJ6005~KBJ610	B1	Approximate 4.27	20	1000	2000	Tube

■ Characteristics(Typical)

FIG1: Io-Tc Curve

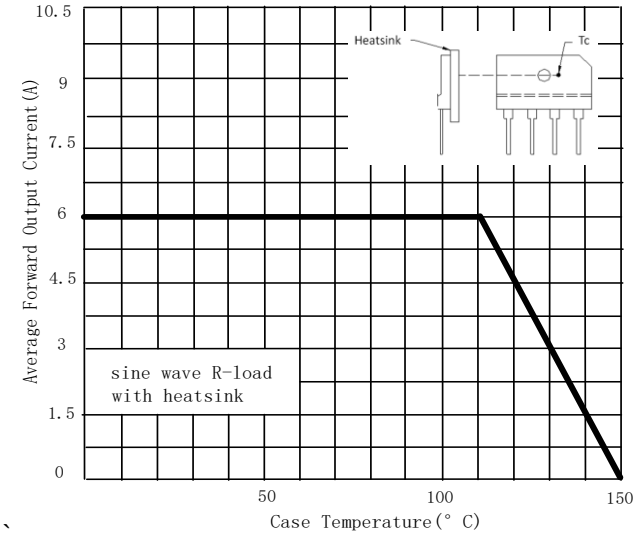


FIG2:Surge Forward Current Capability

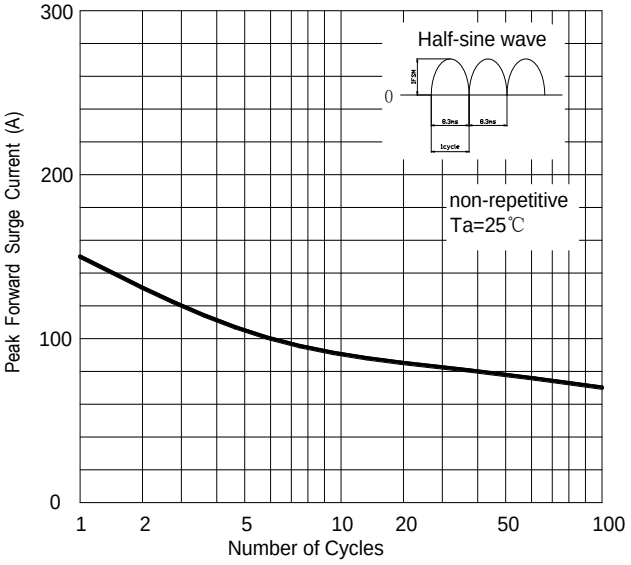


FIG3:Instantaneous Forward Voltage

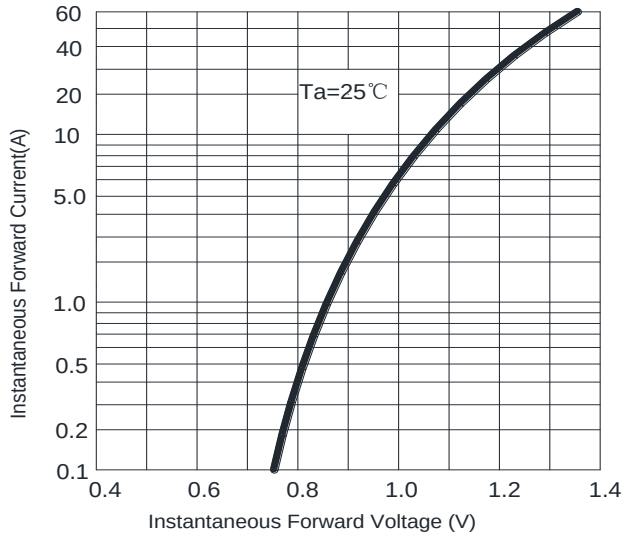
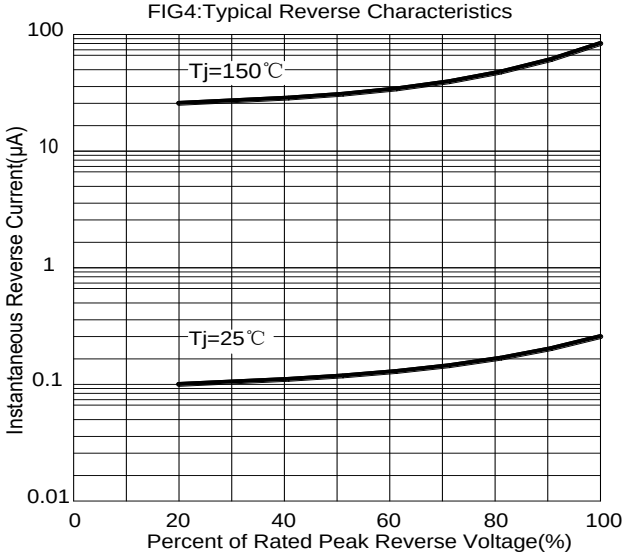
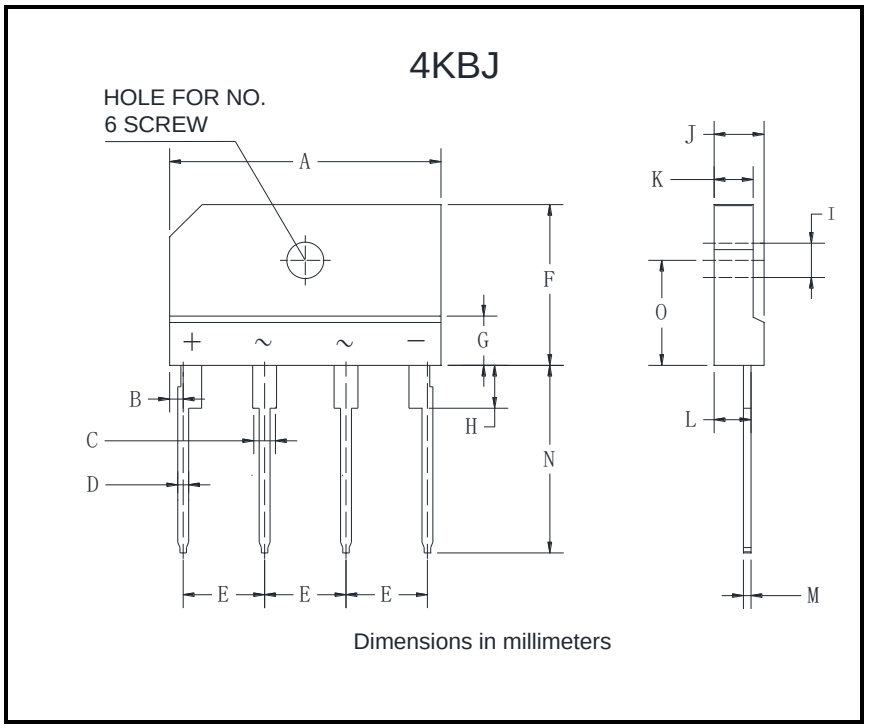


FIG4:Typical Reverse Characteristics



■ Outline Dimensions



4KBJ		
Dim	Min	Max
A	24.7	25.3
B	1.05	1.45
C	1.7	2.1
D	0.9	1.1
E	7.3	7.7
F	14.7	15.3
G	3.8	4.2
H	3.3	3.7
I	3.1	3.4
J	4.4	4.8
K	3.4	3.8
L	3.2	3.4
M	0.6	0.8
N	17.0	18.0
O	9.5	10.1