



LOW VF Bridge Rectifiers

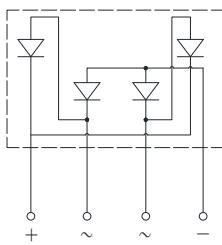


Features

- UL recognition, file #E230084
- Glass passivated chip junction
- Low VF
- 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 (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	KBJL1506
Device marking code			KBJL1506
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 Tc = 105°C Without heatsink Ta = 25°C	IO A	15 3.2
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Tj=25°C	IFSM	A	250
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C			500
Current squared time @1ms≤t≤8.3ms Tj=25°C, rating of per diode	I ² t	A ² S	259
Storage temperature	Tstg	°C	-55 ~ +150
Junction temperature	Tj	°C	-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 (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBJL1506
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=7.5A	0.92
Maximum DC reverse current at rated DC blocking voltage per diode	IR	μA	Tj=25°C	5
			Tj=125°C	100
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	98

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

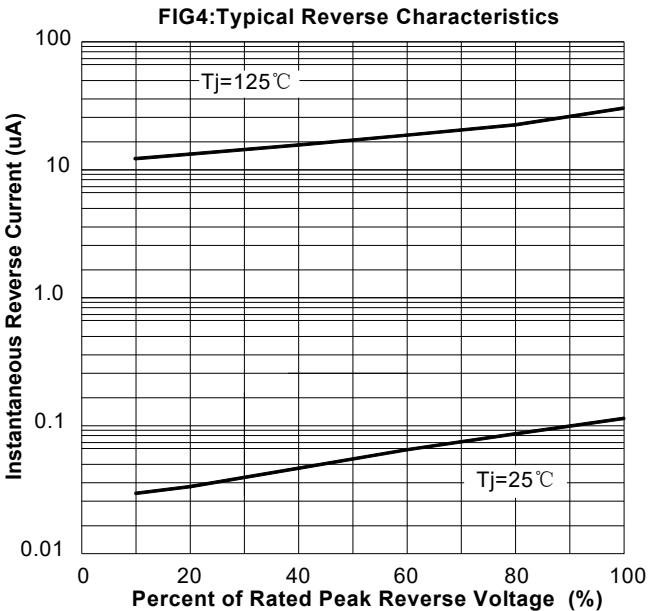
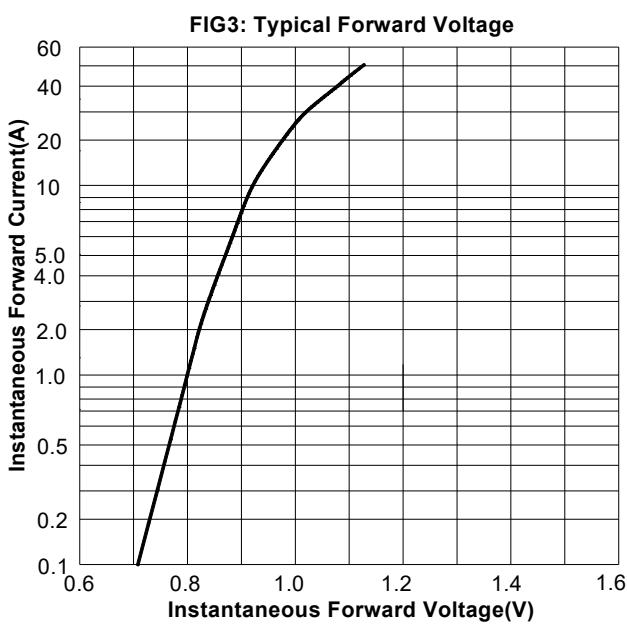
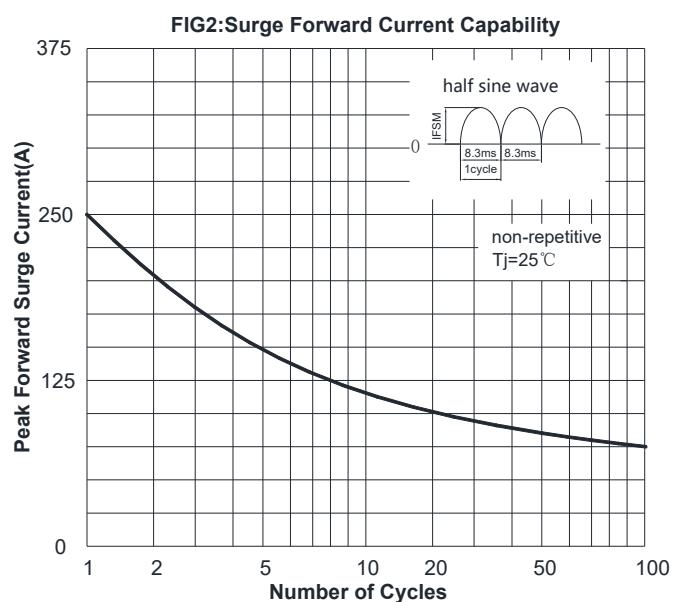
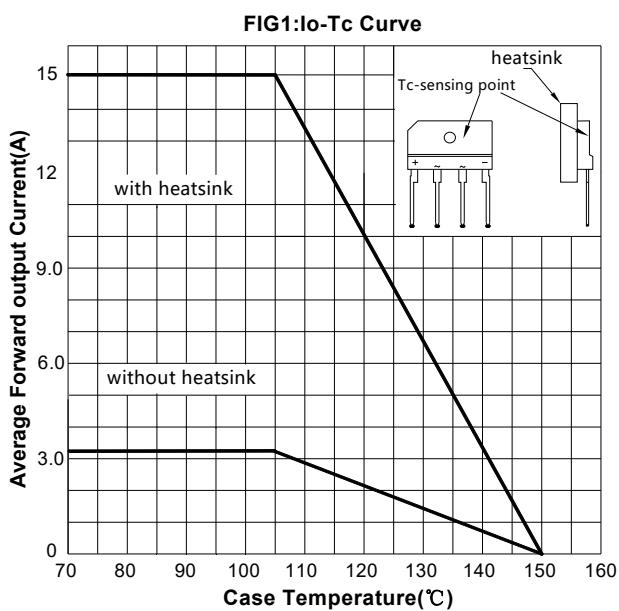
PARAMETER		SYMBOL	UNIT	KBJL1506
Thermal Resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W	20
	Between junction and case, With heatsink	R _{θJ-C}		1.5

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

■ Ordering Information (Example)

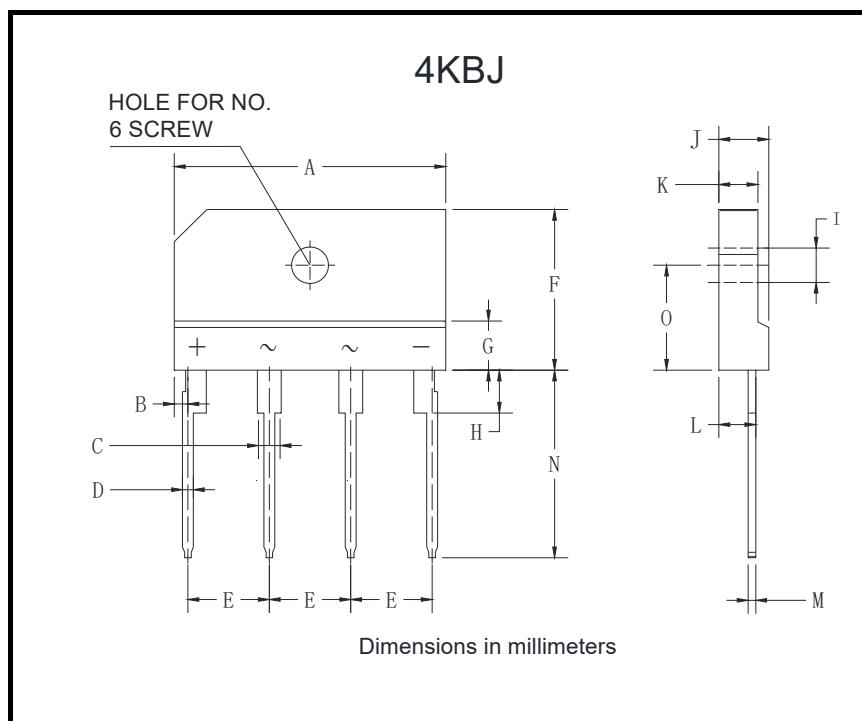
PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
KBJL1506	B1	Approximate 4.27	20	1000	2000	Tube

■ Characteristics(Typical)





■ 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



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