



SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER KBJ4005G ~ KBJ410G

Single Phase Glass Passivated Bridge Rectifier

Features

- Plastic package has UL flammability Classification 94V-0
- High case dielectric strength of 1500 V_{RMS}
- High surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375”(9.5mm) lead length
- RoHS and REACH Compliance

Mechanical Data

Case:	Molded plastic body
Polarity	/
Terminals:	Plated Leads solderable per MIL-STD-750 method 2026
Mounting torque	6 in-lbs max
Mounting position:	Any (note 3)
Weight:	0.15 ounce, 4.0 gram

Maximum Ratings ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

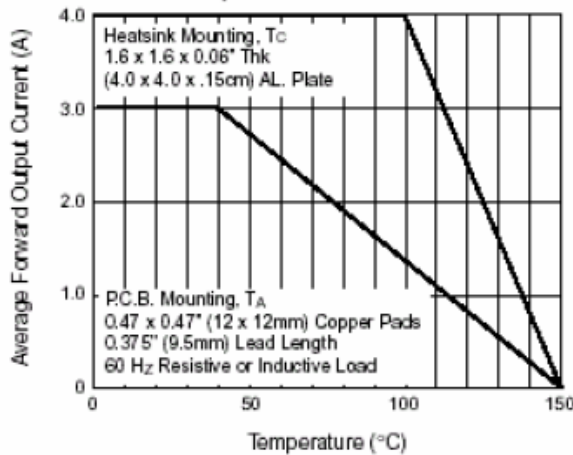
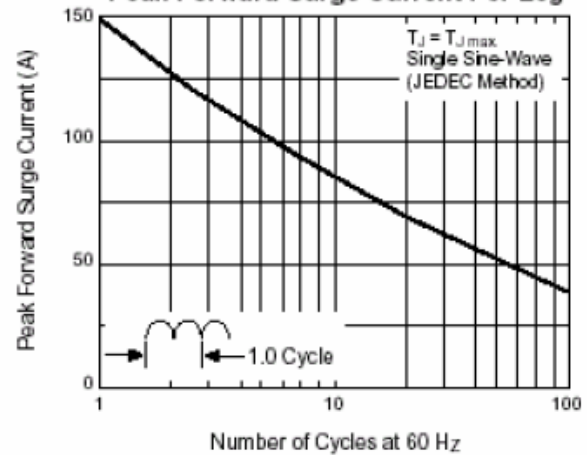
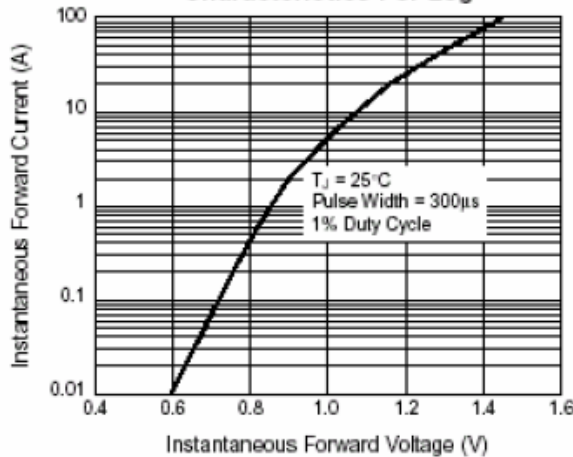
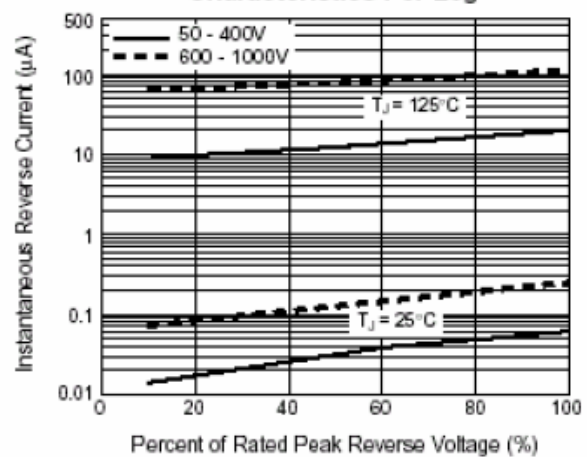
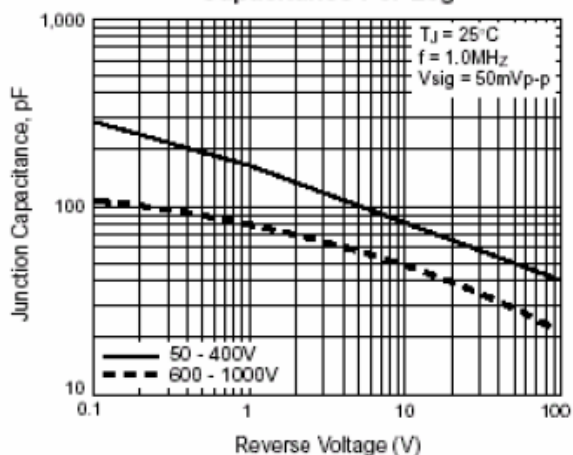
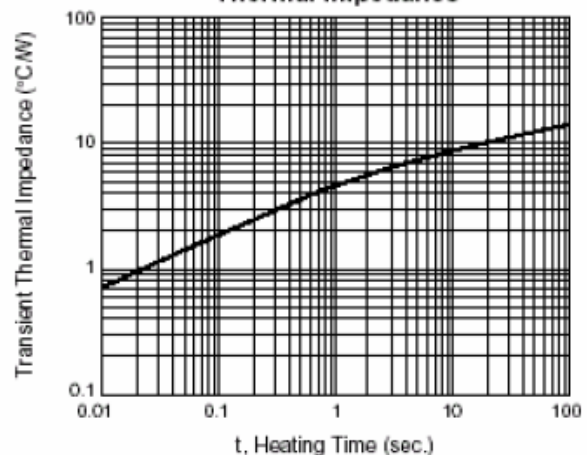
Symbol	Description	KBJ 4005G	KBJ 401G	KBJ 402G	KBJ 404G	KBJ 406G	KBJ 408G	KBJ 410G	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
VRMS	Max RMS Voltage	35	70	140	280	420	560	700	V	
VDC	Max DC Blocking Voltage	50	100	200	400	600	800	1000	V	
I(AV)	Max Average Forward Rectified Current	4.0/3.0							A	@T _c =100°C @TA=40°C
IFSM	Peak Forward Surge Current	150							A	8.3ms single half sine-wave (JEDEC method)
TJ,TSTG	Operating and Storage Temperature Range	-55 to +150							°C	
I2t	Rating for Fusing	93							A2s	T<8.3mS

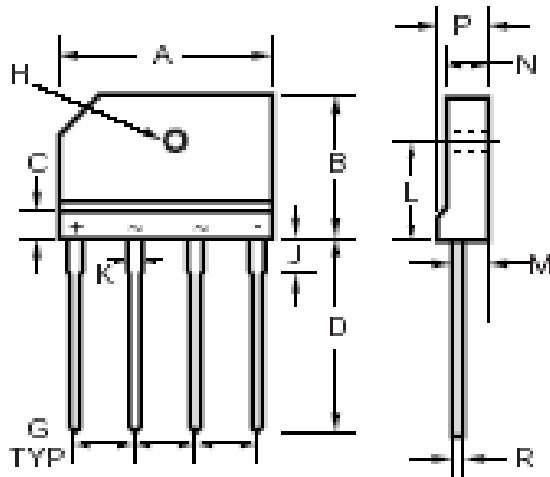
Electrical Characteristics ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	KBJ 4005G	KBJ 401G	KBJ 402G	KBJ 404G	KBJ 406G	KBJ 408G	KBJ 410G	Unit	Conditions
VF	Max Instantaneous Forward Voltage	1.0							V	Drop per Bridge element 2.0A
IR	Max DC Reverse Current at Rated DC Blocking Voltage	5.0							μA	TA=25°C
		500								Tc=125°C
Rθ-Ja	Typical Thermal Resistance	22							°C/W	Note 1
Cj	Typical Junction capacitance per leg	100			45				pF	Measured at 1.0MHz/4.0V

Note:

1. Unit mounted on 1.6” X 1.6” X 0.06” (4cm x 4cm x 0.15cm) AL Plate
2. Unit mounted on PCB with 0.5” x 0.5”(12mm x 12mm) copper pads and 0.375 (9.5mm) lead length
3. Recommended mounting position is to bolt down on heat-sink using #6 screw and silicon thermal compound for maximum heat transfer

KBJ4005G ~ KBJ410G
RATINGS AND CHARACTERISTIC CURVES KBJ4005G ~ KBJ410G
**Fig. 1 — Derating Curve
Output Rectified Current**

**Fig. 2 — Maximum Non-Repetitive
Peak Forward Surge Current Per Leg**

**Fig. 3 — Typical Forward
Characteristics Per Leg**

**Fig. 4 — Typical Reverse Leakage
Characteristics Per Leg**

**Fig. 5 — Typical Junction
Capacitance Per Leg**

**Fig. 6 — Typical Transient
Thermal Impedance**


KBJ4005G ~ KBJ410G
Dimensions in inches (mm)


KBJ		
Dim	Min	Max
A	24.80	25.20
B	14.70	15.30
C	4.00 Nominal	
D	17.20	17.80
E	0.90	1.10
G	7.30	7.70
H	3.10 ϕ	3.40 ϕ
J	3.30	3.70
K	1.50	1.90
L	9.30	9.70
M	2.50	2.90
N	3.40	3.80
P	4.40	4.80
R	0.60	0.80
All Dimensions in mm		

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