

Glass Passivated Bridge Rectifiers

FEATURES

- UL Recognized File # E-326243
- Glass passivated junction
- Ideal for printed circuit board
- High case dielectric strength
- Typical IR less than 0.1uA
- High surge current capability
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



KBU



MECHANICAL DATA

Case : KBU

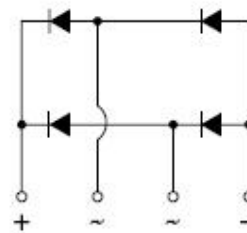
Molding compound, UL flammability classification rating 94V-0

Terminal : Matte tin plated leads, solderable per JESD22-B102
Meet JESD 201 class 1A whisker test

Polarity : Polarity as marked on the body

Mounting torque : 5 in lbs max.

Weight : 7.2 gram (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)									
PARAMETER	SYMBOL	KBU 401G	KBU 402G	KBU 403G	KBU 404G	KBU 405G	KBU 406G	KBU 407G	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}	4							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	150							A
Rating for fusing (t<8.3mS)	I ² T	93							A ² sec
Maximum instantaneous forward voltage (Note 1) IF= 2A IF= 4A	V _F	1.0 1.1							V
Maximum DC reverse current at rated DC blocking voltage	I _R	5 500							uA
Typical junction capacitance per leg	C _j	240							pF
Typical thermal resistance	R _{θJC} R _{θJA}	4 19							°C/W
Operating junction temperature range	T _J	- 55 to + 150							°C
Storage temperature range	T _{STG}	- 55 to + 150							°C

Note 1 : Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2 : Measured at 1MHz and applied Reverse Voltage of 4.0V D.C.

ORDERING INFORMATION			
PART NO.	PACKING CODE	PACKAGE	PACKING
KBU40xG (Note 1)	T0	KBU	500 / Tray

Note 1: "x" defines voltage from 50V (KBU401G) to 1000V (KBU407G)

EXAMPLE			
PREFERRED P/N	PART NO.	PACKING CODE	DESCRIPTION
KBU407G T0	KBU407G	T0	

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

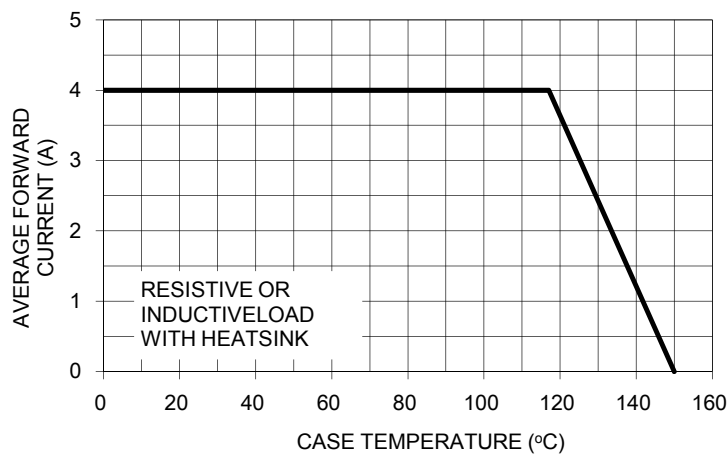


FIG. 2 MAXIMUM FORWARD SURGE CURRENT PER LEG

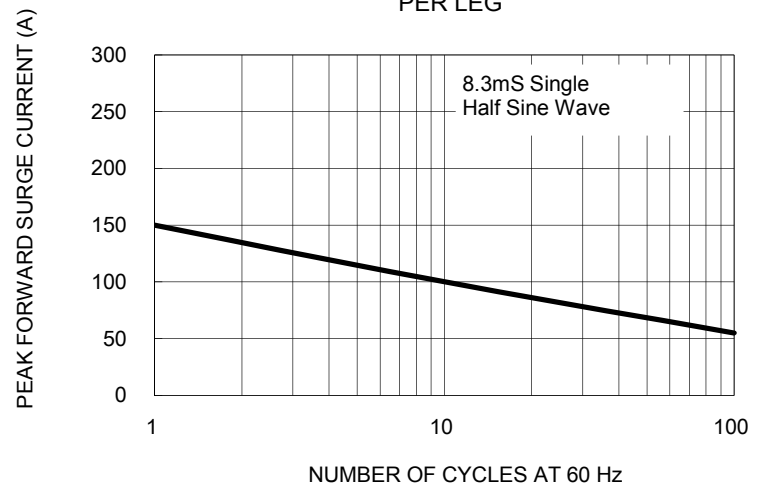


FIG. 3 TYPICAL REVERSE CHARACTERISTICS PER LEG

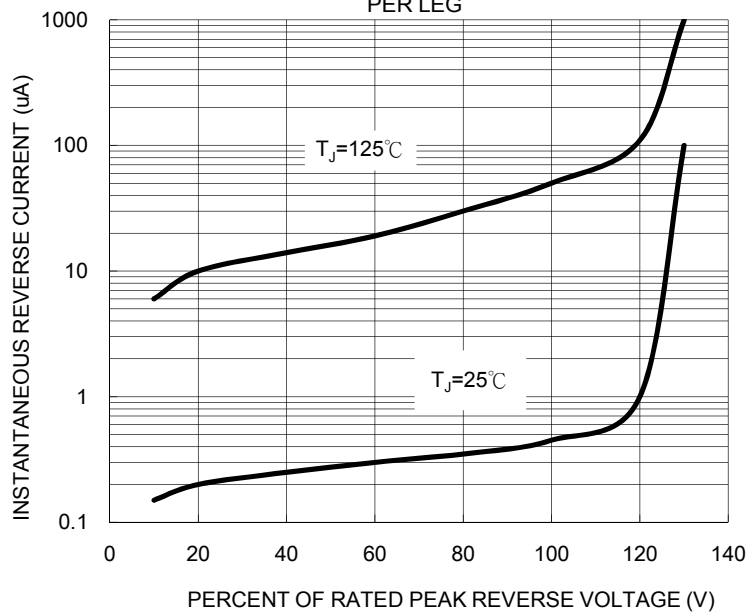


FIG. 4 TYPICAL FORWARD CHARACTERISTICS PER LEG

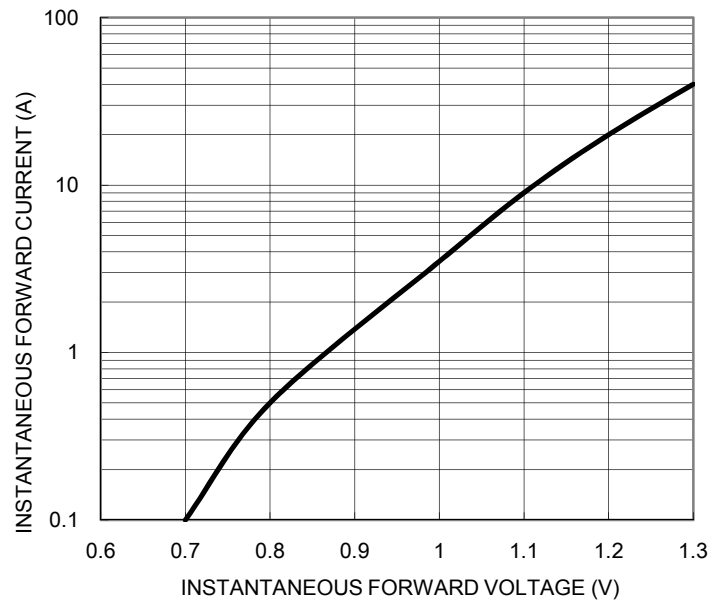
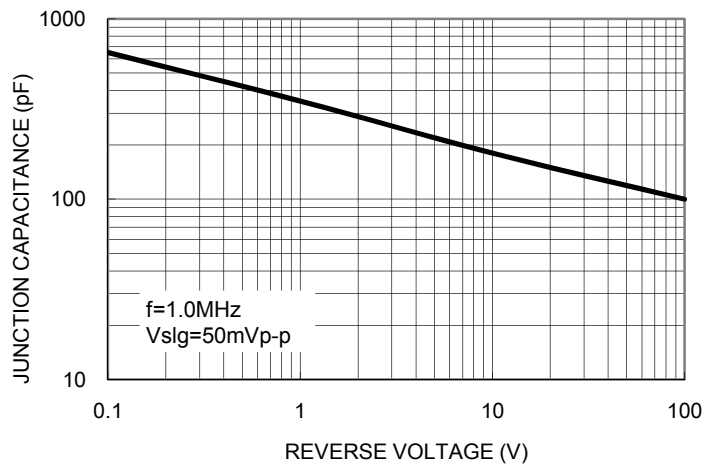
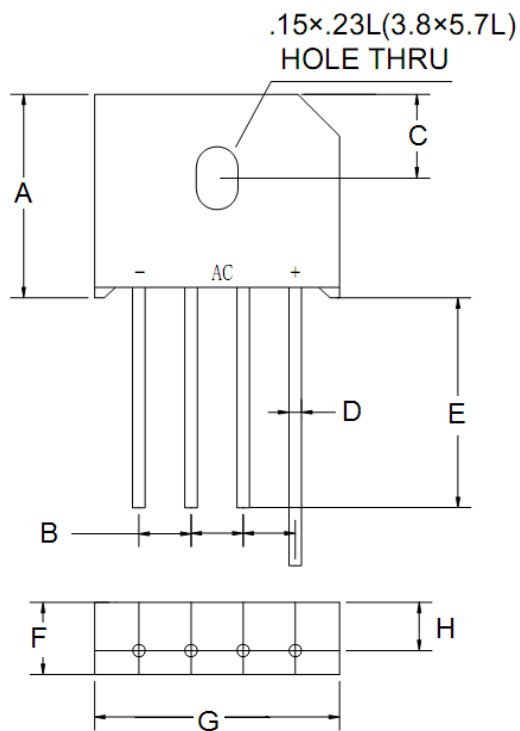


FIG. 5 TYPICAL JUNCTION CAPACITANCE

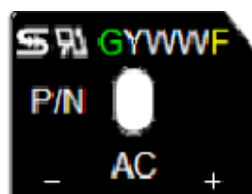


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	18.80	19.80	0.740	0.780
B	4.60	5.60	0.181	0.220
C	8.2 (TYP.)		0.322 (TYP.)	
D	1.20	1.30	0.047	0.051
E	20.00	-	0.787	-
F	6.80	7.10	0.268	0.280
G	22.70	23.70	0.894	0.933
H	4.60	5.00	0.181	0.197

MARKING DIAGRAM



- P/N = Specific Device Code
- G = Green Compound
- YWW = Date Code
- F = Factory Code