

## Glass Passivated Bridge Rectifiers

### FEATURES

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


**KBU**


### MECHANICAL DATA

**Case:** KBU

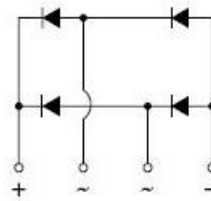
Molding compound, UL flammability classification rating 94V-0

**Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

**Mounting torque:** 0.56 N·m max.

**Weight:** 7.2 g (approximately)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	KBU 801G	KBU 802G	KBU 803G	KBU 804G	KBU 805G	KBU 806G	KBU 807G	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	8							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200							A
Rating for fusing (t<8.3mS)	I <sup>2</sup> t	166							A <sup>2</sup> s
Maximum instantaneous forward voltage (Note 1) I <sub>F</sub> = 4 A I <sub>F</sub> = 8 A	V <sub>F</sub>	1.0 1.1							V
Maximum DC reverse current at rated DC blocking voltage T <sub>J</sub> =25°C T <sub>J</sub> =125°C	I <sub>R</sub>	5 500							μA
Typical junction capacitance per leg	C <sub>j</sub>	400							pF
Typical thermal resistance	R <sub>θJC</sub> R <sub>θJA</sub>	3 18							°C/W
Operating junction temperature range	T <sub>J</sub>	- 55 to +150							°C
Storage temperature range	T <sub>STG</sub>	- 55 to +150							°C

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

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

ORDERING INFORMATION		
ORDERING CODE	PACKAGE	PACKING
KBU801G T0	KBU	500 / Trays
KBU802G T0	KBU	500 / Trays
KBU803G T0	KBU	500 / Trays
KBU804G T0	KBU	500 / Trays
KBU805G T0	KBU	500 / Trays
KBU806G T0	KBU	500 / Trays
KBU807G T0	KBU	500 / Trays

**RATINGS AND CHARACTERISTICS CURVES**

( $T_A=25^\circ\text{C}$  unless otherwise noted)

FIG.1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

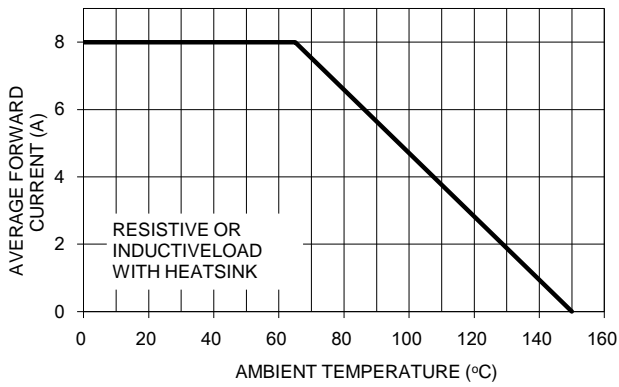


FIG. 2 MAXIMUM FORWARD SURGE CURRENT PER LEG

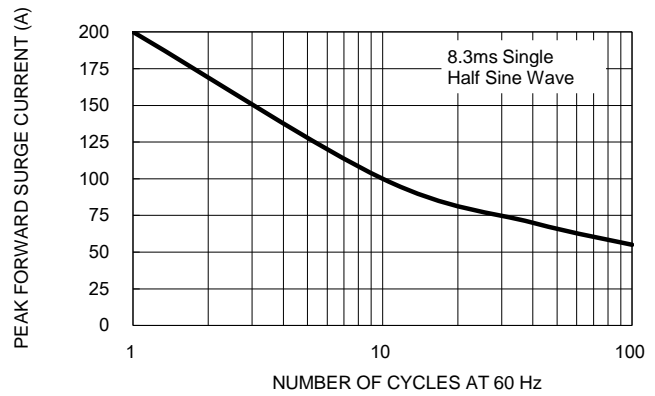


FIG. 3 TYPICAL REVERSE CHARACTERISTICS PER LEG

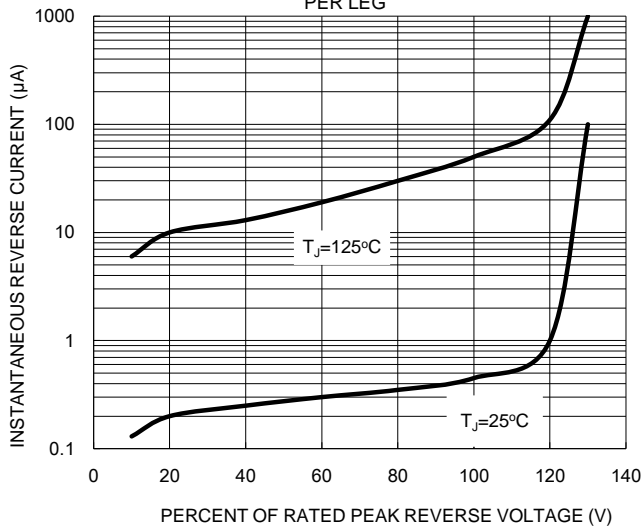


FIG. 4 TYPICAL FORWARD CHARACTERISTICS PER LEG

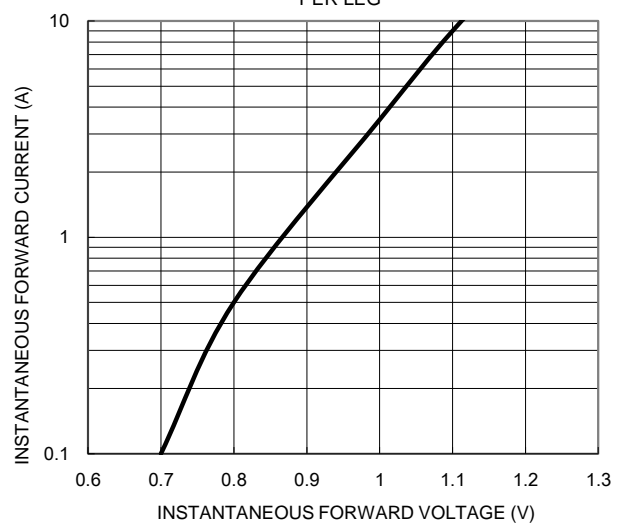
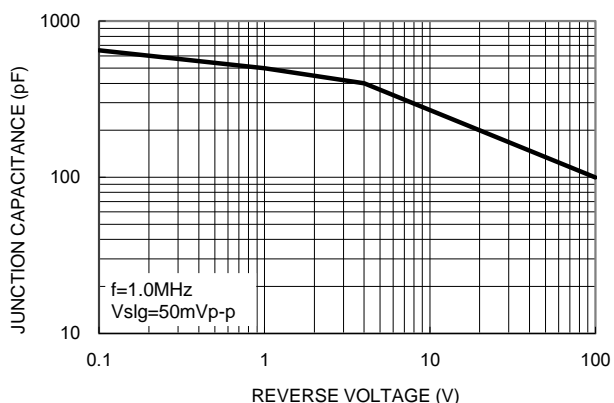
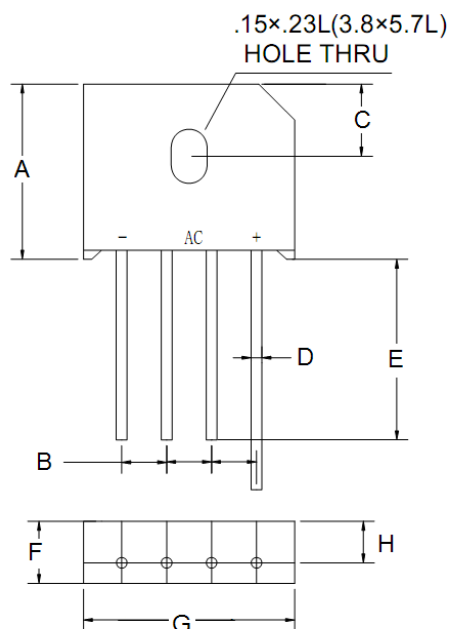


FIG. 5 TYPICAL JUNCTION CAPACITANCE



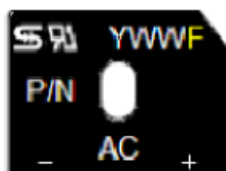
**PACKAGE OUTLINE DIMENSIONS**

**KBU**



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	18.8	19.8	0.740	0.780
B	4.6	5.6	0.181	0.220
C	8.2 (TYP.)		0.322 (TYP.)	
D	1.2	1.3	0.047	0.051
E	20.0	-	0.787	-
F	6.8	7.1	0.268	0.280
G	22.7	23.7	0.894	0.933
H	4.6	5.0	0.181	0.197

**MARKING DIAGRAM**



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

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