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

Pb-Free

RoHS COMPLIANT

MECHANICAL DATA

Case: KBU

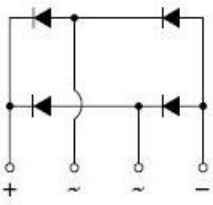
Molding compound, UL flammability classification rating 94V-0

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_A=25℃ unless otherwise noted)

PARAMETER	SYMBOL	KBU 1001G	KBU 1002G	KBU 1003G	KBU 1004G	KBU 1005G	KBU 1006G	KBU 1007G	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	$I_{F(AV)}$	10							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	200							A
Rating for fusing (t<8.3ms)	I^2t	166							A^2S
Maximum instantaneous forward voltage (Note 1) I_F= 5 A I_F= 10 A	V_F	 1.0 1.1							V
Maximum DC reverse current T_J=25 °C at rated DC blocking voltage T_J=125 °C	I_R	5 500							μA
Typical junction capacitance per leg	Cj	400							pF
Typical thermal resistance	$R_{\theta JC}$ $R_{\theta JA}$	2.2 25							°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=300μs, 1% Duty Cycle

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

ORDERING INFORMATION		
ORDERING CODE	**PACKAGE**	**PACKING**
KBU1001G T0	KBU	500 / Trays
KBU1002G T0	KBU	500 / Trays
KBU1003G T0	KBU	500 / Trays
KBU1004G T0	KBU	500 / Trays
KBU1005G T0	KBU	500 / Trays
KBU1006G T0	KBU	500 / Trays
KBU1007G T0	KBU	500 / Trays

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

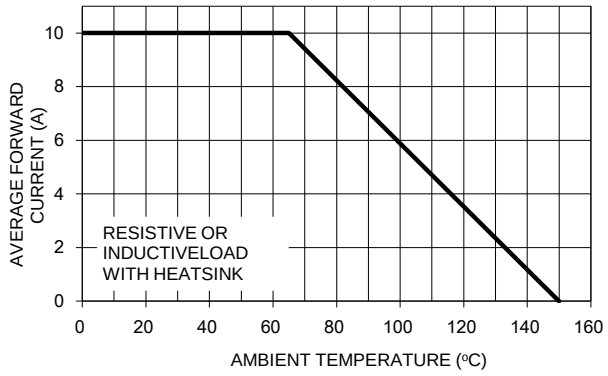


FIG. 2 MAXIMUM FORWARD SURGE CURRENT PER LEG

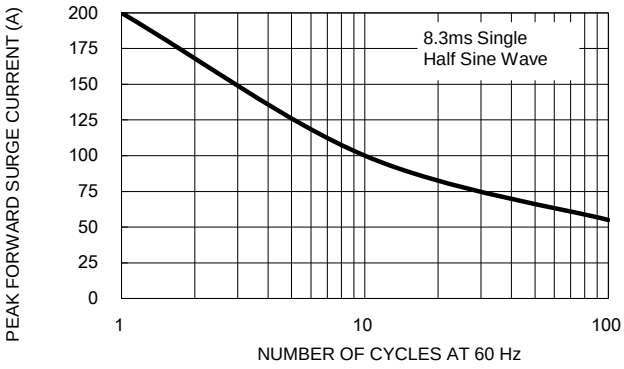


FIG. 3 TYPICAL REVERSE CHARACTERISTICS PER LEG

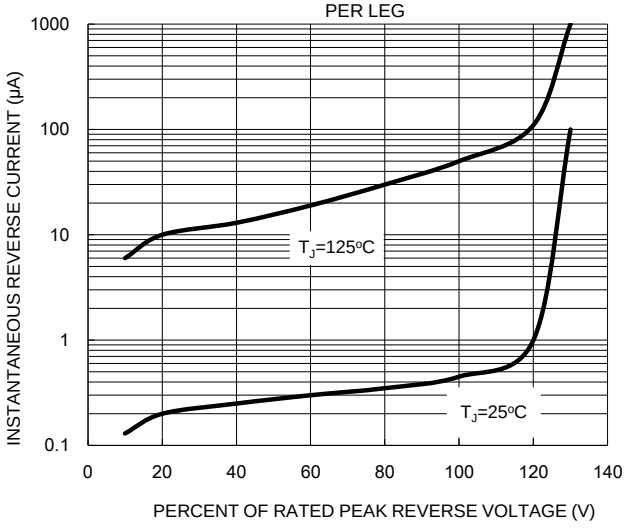


FIG. 4 TYPICAL FORWARD CHARACTERISTICS PER LEG

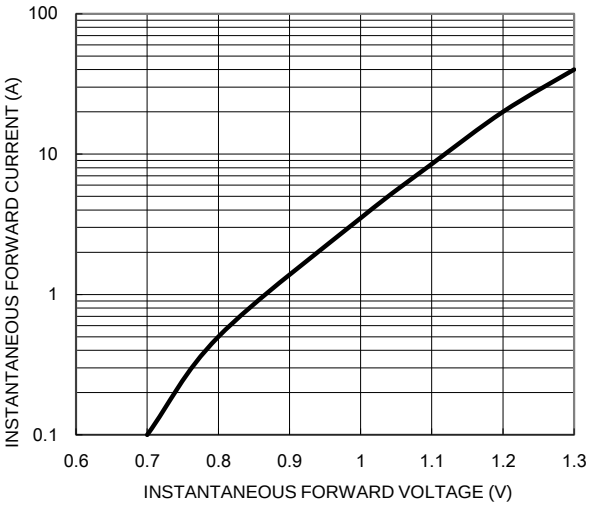
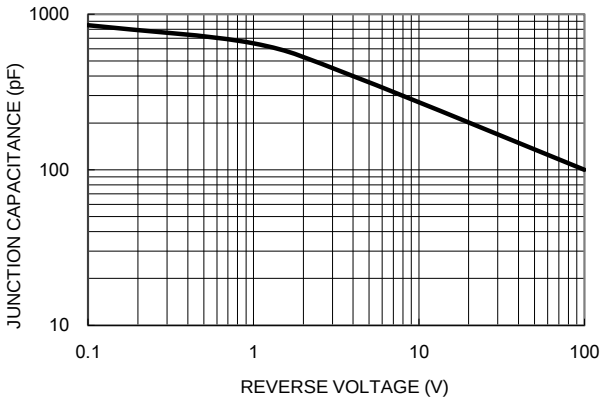
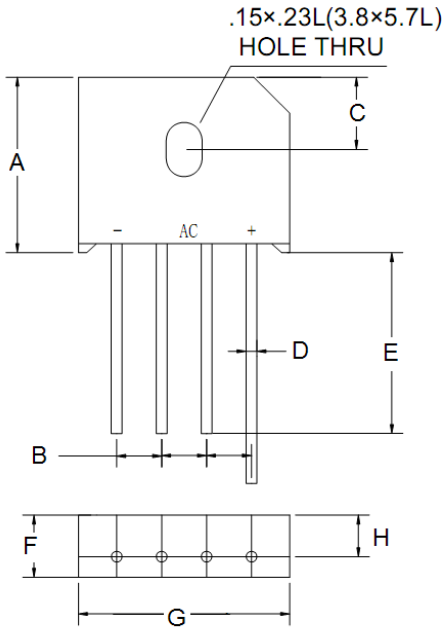


FIG. 5 TYPICAL JUNCTION CAPACITANCE



PACKAGE OUTLINE DIMENSIONS

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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