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
- Halogen-free according to IEC 61249-2-21 definition

KBU

Pb-Free

RoHS COMPLIANT

MECHANICAL DATA

Case: KBU

Molding compound, UL flammability classification rating 94V-0

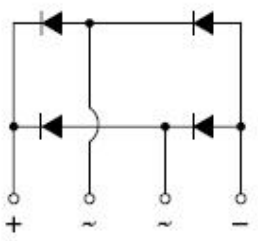
Base P/N with suffix "G" on packing code - green compound (halogen-free)

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

Meet JESD 201 class 1A whisker test

Mounting torque: 0.56 Nm max.

Weight: 7.2 g (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=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_{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	$I_{F(AV)}$	8							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= 4 A I_F= 8 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	$R_{\theta JC}$ $R_{\theta JA}$	3 18							°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				
PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
KBU80xG (Note 1)	T0	G	KBU	500 / Tray

Note 1: "x" defines voltage from 50V (KBU801G) to 1000V (KBU807G)

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
KBU807G T0	KBU807G	T0		
KBU807G T0G	KBU807G	T0	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG.1 MAXIMUM DERATING CURVE FOR OUTPUT CURRNET

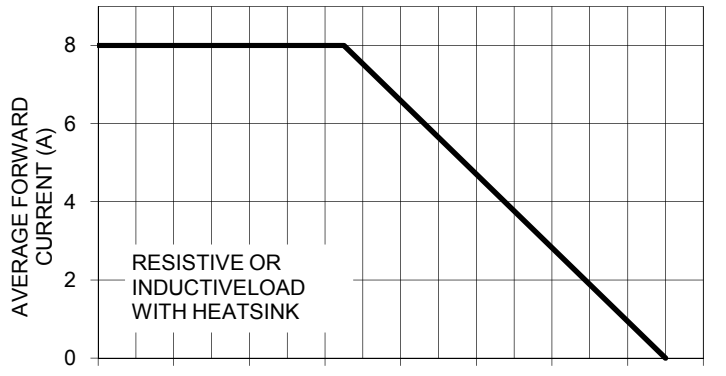


FIG. 2 MAXIMUM FORWARD SURGE CURRENT PER LEG

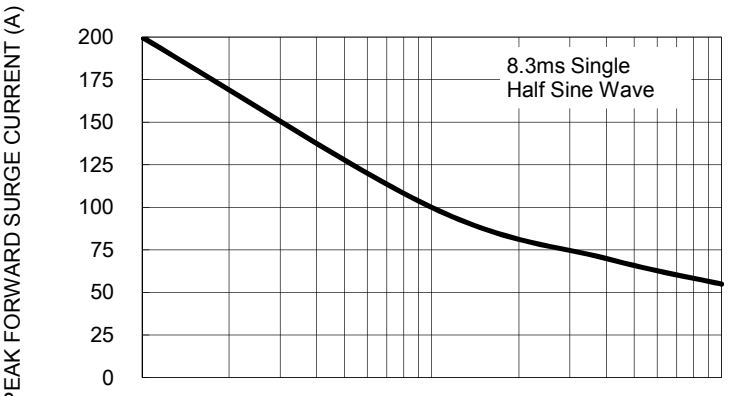


FIG. 3 TYPICAL REVERSE CHARACTERISTICS PER LEG

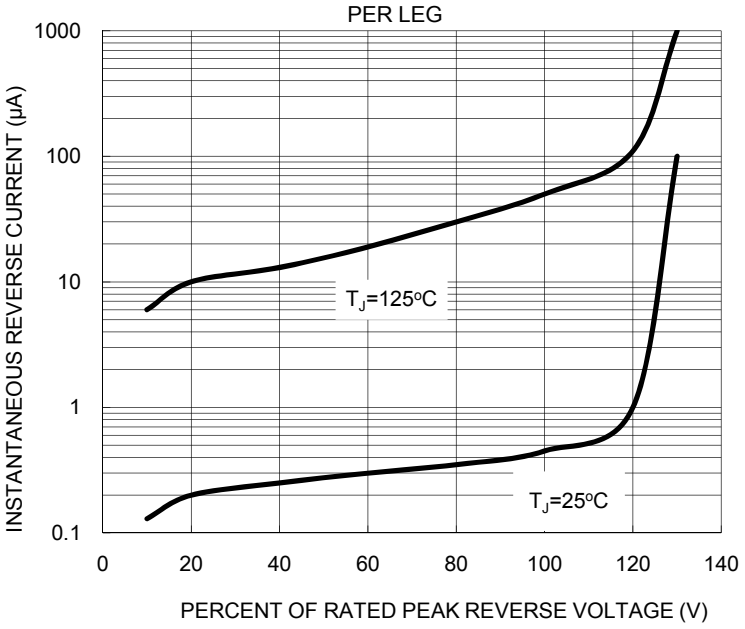


FIG. 4 TYPICAL FORWARD CHARACTERISTICS PER LEG

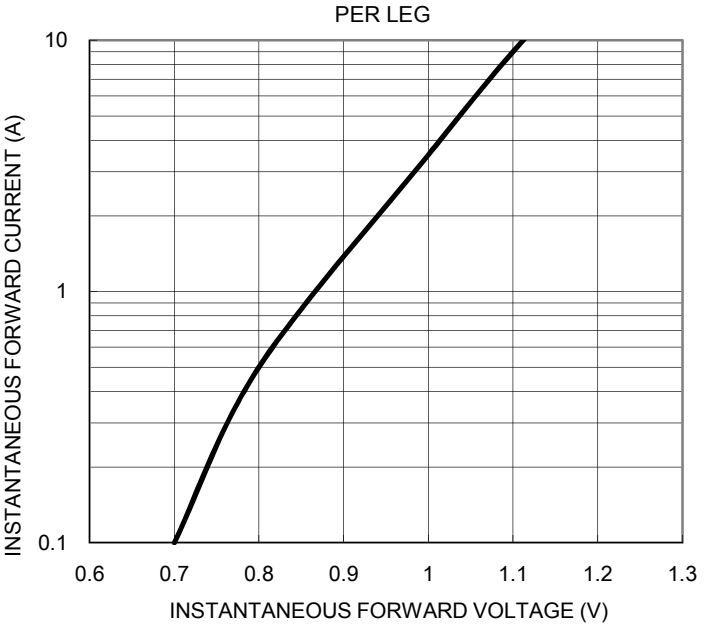
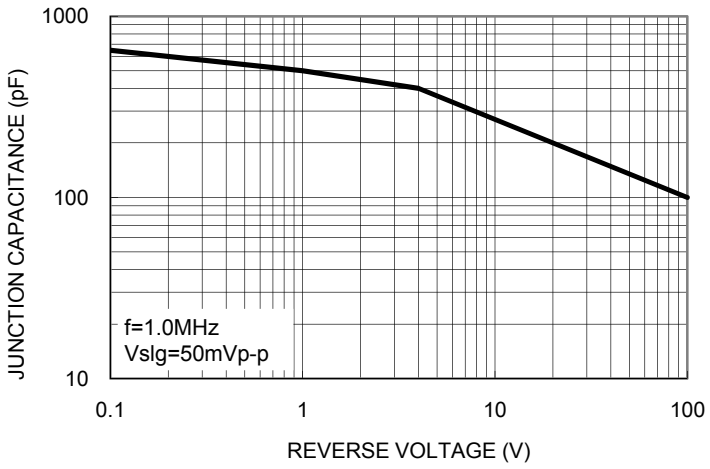
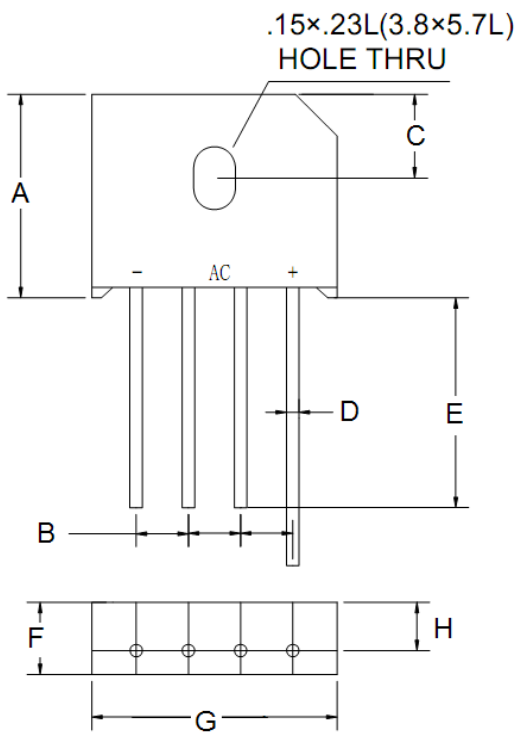


FIG. 5 TYPICAL JUNCTION CAPACITANCE



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
G = Green Compound
YWW = Date Code
F = Factory Code

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