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

Pb-Free

RoHS COMPLIANT

MECHANICAL DATA

Case：KBU

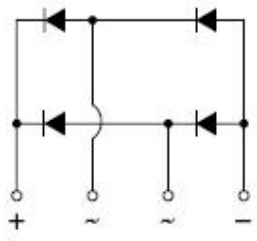
Molding compound, UL flammability classification rating 94V-0

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

Polarity：Polarity as marked on the body

Mounting torque：5 in lbs max.

Weight：7.2 gram (approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERSTICS (T_A=25℃ unless otherwise noted)

PARAMETER	SYMBOL	KBU 601G	KBU 602G	KBU 603G	KBU 604G	KBU 605G	KBU 606G	KBU 607G	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	$I_{F(AV)}$	6							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	175							A
Rating for fusing (t<8.3mS)	I^2T	127							A^2sec
Maximum instantaneous forward voltage (Note 1) IF= 3 A IF= 6 A	V_F	 1.0 1.1							V
Maximum DC reverse current T_J=25 ℃ at rated DC blocking voltage T_J=125℃	I_R	 5 500							uA
Typical junction capacitance per leg	Cj	400							pF
Typical thermal resistance	$R_{\theta JC}$ $R_{\theta JA}$	3.1 8.6							$^OC/W$
Operating junction temperature range	T_J	- 55 to + 150							^OC
Storage temperature range	T_{STG}	- 55 to + 150							^OC

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
KBU60xG (Note 1)	T0	KBU	500 / Tray

Note 1: "x" defines voltage from 50V (KBU601G) to 1000V (KBU607G)

EXAMPLE			
PREFERRED P/N	PART NO.	PACKING CODE	DESCRIPTION
KBU607G T0	KBU607G	T0	

RATINGS AND CHARACTERISTICS CURVES

(TA=25℃ unless otherwise noted)

FIG.1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

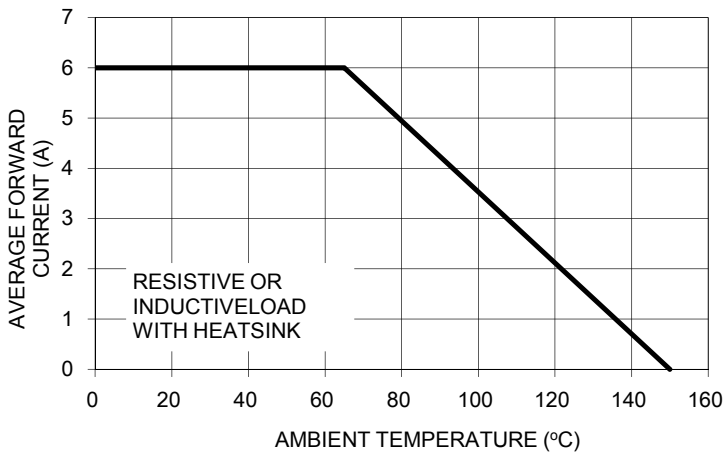


FIG. 2 MAXIMUM FORWARD SURGE CURRENT PER LEG

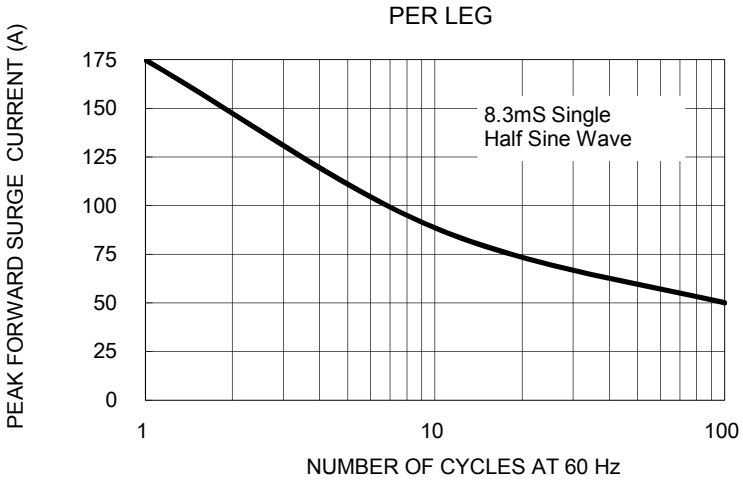


FIG. 3 TYPICAL REVERSE CHARACTERISTICS PER LEG

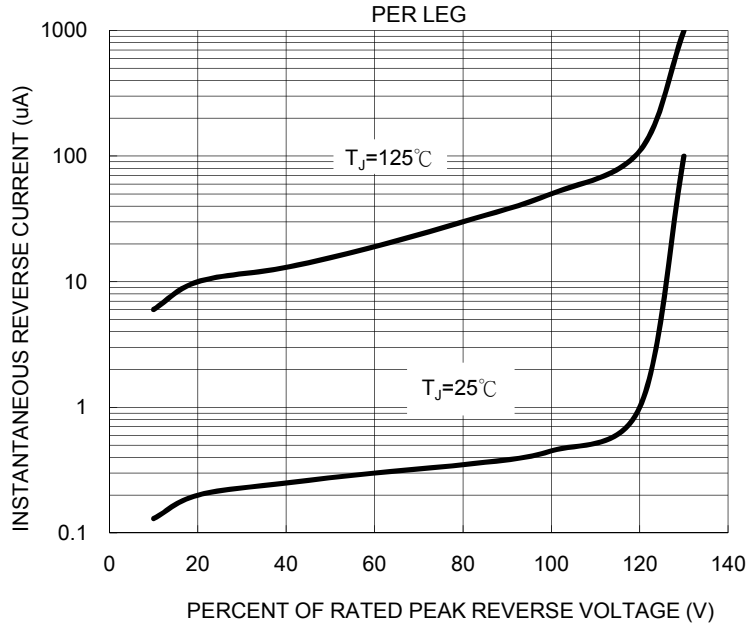


FIG. 4 TYPICAL FORWARD CHARACTERISTICS PER LEG

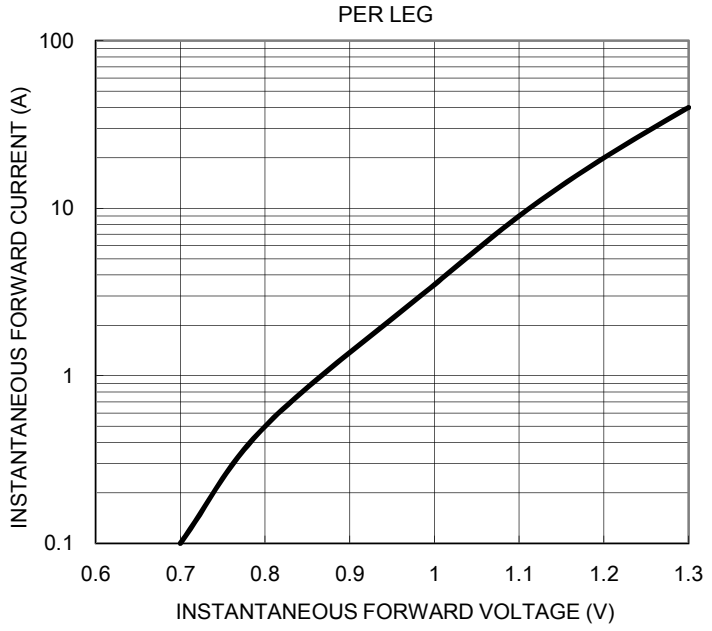
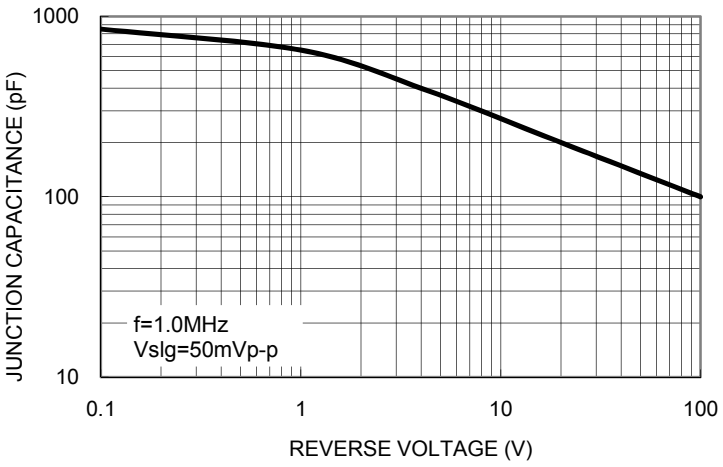
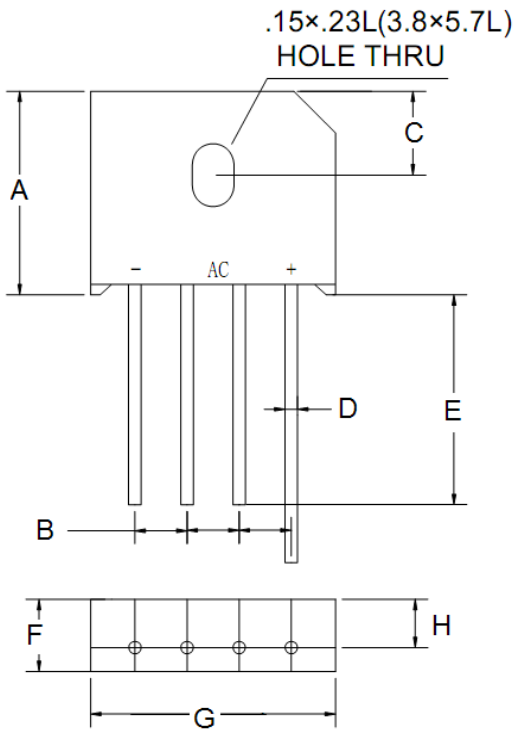


FIG. 5 TYPICAL JUNCTION CAPACITANCE

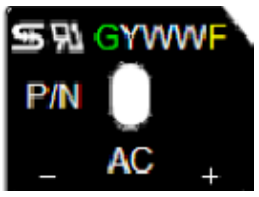


PACKAGE OUTLINE DIMENSIONS



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