



# **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** 





### MECHANICAL DATA

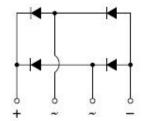
Case: KBU

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 <sub>A</sub> =25°C unless otherwise noted)									
PARAMETER	SYMBOL	KBU	KBU	KBU	KBU	KBU	KBU	KBU	Unit
TANAMETEN	STWIDOL	801G	802G	803G	804G	805G	806G	807G	
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	٧
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	٧
Maximum average forward rectified current	$I_{F(AV)}$	8						Α	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200				Α			
Rating for fusing (t<8.3mS)	l <sup>2</sup> t	166						$A^2s$	
Maximum instantaneous forward voltage (Note 1) $I_F$ = 4 A $I_F$ = 8 A	V <sub>F</sub>				1.0 1.1				V
Maximum DC reverse current $T_J=25^{\circ}C$ at rated DC blocking voltage $T_J=125^{\circ}C$	I <sub>R</sub>	5 500				μΑ			
Typical junction capacitance per leg	Cj	400			pF				
Typical thermal resistance	$R_{ extstyle{ heta}JC}$ $R_{ extstyle{ heta}JA}$	3 18			°C/W				
Operating junction temperature range	T <sub>J</sub> - 55 to +150			оС					
Storage temperature range	T <sub>STG</sub>	- 55 to +150					оС		

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

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



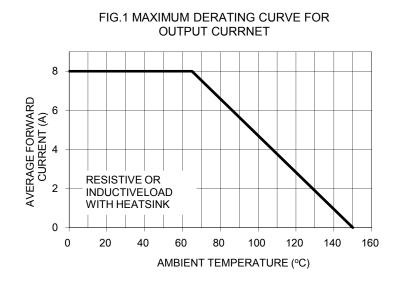
ORDERING INFORMATION						
PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING		
KBU80xG (Note 1)	T0	G	KBU	500 / Tray		

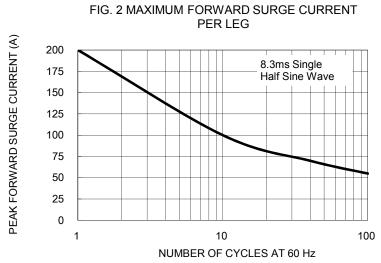
Note 1: "x" defines voltage from 50V (KBU801G) to 1000V (KBU807G)

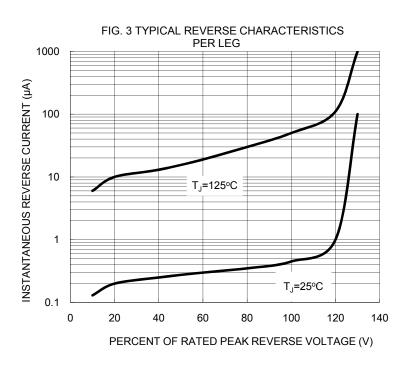
EXAMPLE						
PREFERRED P/N	PART NO. PACKING CODE		PACKING CODE SUFFIX	DESCRIPTION		
KBU807G T0	KBU807G	T0				
KBU807G T0G	KBU807G	T0	G	Green compound		

## RATINGS AND CHARACTERISTICS CURVES

(T<sub>A</sub>=25°C unless otherwise noted)







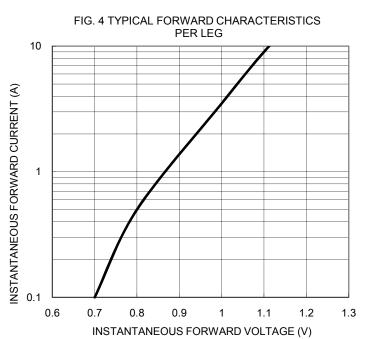
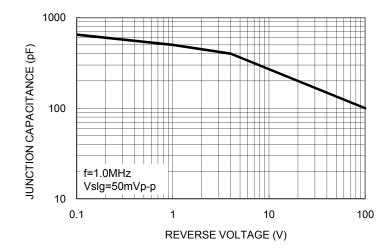


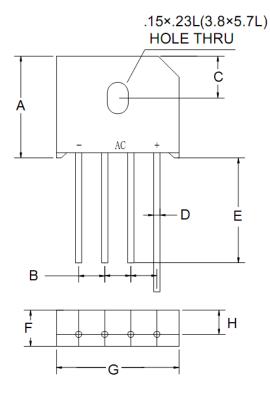


FIG. 5 TYPICAL JUNCTION CAPACITANCE



# PACKAGE OUTLINE DIMENSIONS

## **KBU**



DIM.	Unit	(mm)	Unit (inch)			
DIW.	Min	Max	Min	Max		
Α	18.8	19.8	0.740	0.780		
В	4.6	5.6	0.181	0.220		
С	8.2 (	TYP.)	0.322 (TYP.)			
D	1.2	1.3	0.047	0.051		
Е	20.0	-	0.787	-		
F	6.8	7.1	0.268	0.280		
G	22.7	23.7	0.894	0.933		
Н	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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