



## **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)

	CVMPC	KBU K	KBU	KBU	KBU	KBU	KBU	KBU	
PARAMETER	SYMBOL	401G	402G	403G	404G	405G	406G	407G	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 <sub>F(AV)</sub>				4				Α
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	150				А			
Rating for fusing (t<8.3ms)	l <sup>2</sup> t				93				A <sup>2</sup> s
Maximum instantaneous forward voltage (Note 1) I <sub>F</sub> = 2A I <sub>F</sub> = 4A	V <sub>F</sub>				1.0 1.1				V
Maximum DC reverse current $T_J$ =25 °C at rated DC blocking voltage $T_J$ =125 °C	I <sub>R</sub>	5 500			μA				
Typical junction capacitance per leg	Cj				240				pF
Typical thermal resistance	$R_{ hetaJC} \ R_{ hetaJA}$	4 19						°C/W	
Operating junction temperature range	TJ	- 55 to +150						οС	
Storage temperature range	T <sub>STG</sub>			_	55 to +15	50			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.



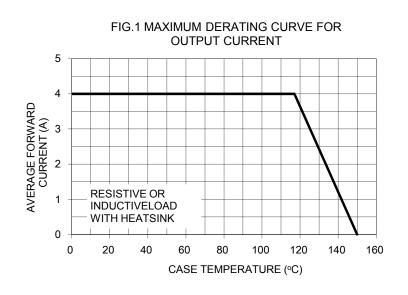
ORDERING INFORMATION						
PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING		
KBU40xG (Note 1)	ТО	G	KBU	500 / Tray		

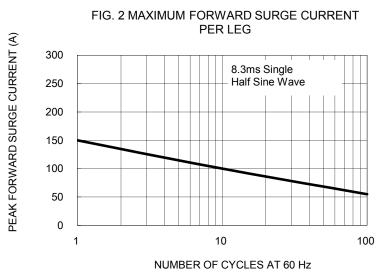
Note 1: "x" defines voltage from 50V (KBU401G) to 1000V (KBU407G)

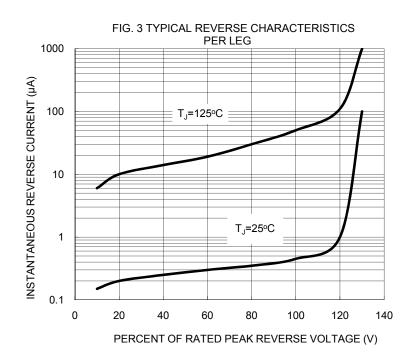
EXAMPLE							
PREFERRED P/N PART NO		PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION			
KBU407G T0	KBU407G	T0					
KBU407G T0G	KBU407G	T0	G	Green compound			

#### **RATINGS AND CHARACTERISTICS CURVES**

(TA=25°C unless otherwise noted)







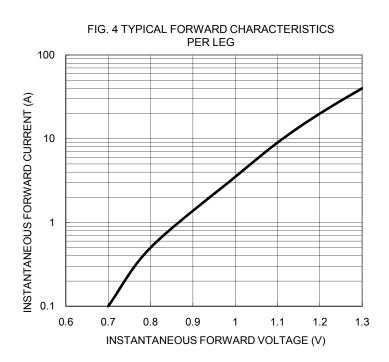
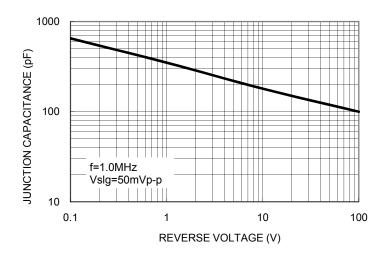
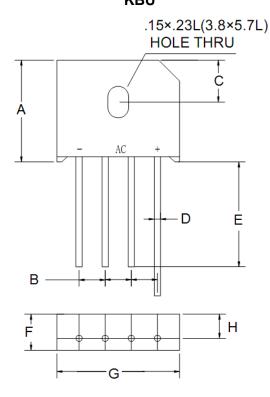




FIG. 5 TYPICAL JUNCTION CAPACITANCE



# PACKAGE OUTLINE DIMENSIONS KBU



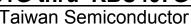
DIM.	Unit	(mm)	Unit (inch)			
DIIVI.	Min Max		Min	Max		
Α	18.8	19.8	0.740	0.780		
В	4.6 5.6		0.181	0.220		
С	8.2 (	TYP.)	0.322 (TYP.)			
D	1.2	1.3	0.047	0.051		
Е	20.0	-	0.787	-		
F	6.8	7.1	0.268	0.280		
G	22.7	23.7	0.894	0.933		
Н	4.6	5.0	0.181	0.197		

### **MARKING DIAGRAM**



P/N = Specific Device Code G = Green Compound

YWW = Date Code F = Factory Code





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