

Glass Passivated Bridge Rectifiers

FEATURES

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- 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



MECHANICAL DATA

Case: KBP

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - halogen-free

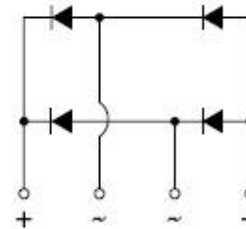
Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

Polarity: Polarity as marked on the body

Weight: 1.5 g (approximately)

KBP



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)									
PARAMETER	SYMBOL	KBP 151G	KBP 152G	KBP 153G	KBP 154G	KBP 155G	KBP 156G	KBP 157G	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)}	1.5							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	50							A
Rating for fusing (t<8.3ms)	I ² t	10.3							A ² s
Maximum instantaneous forward voltage (Note 1) I _F = 1.5 A	V _F	1.1							V
Maximum DC reverse current at rated DC blocking voltage	I _R	10 500							μA
Typical thermal resistance	R _{θJL}	13							°C/W
	R _{θJA}	40							
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

ORDERING INFORMATION				
PART NO.	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING
KBP15xG (Note 1)	C2	Suffix "G"	KBP	25 / TUBE

Note 1: "x" defines voltage from 50V (KBP151G) to 1000V (KBP157G)

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
KBP157G C2	KBP157G	C2		
KBP157G C2G	KBP157G	C2	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

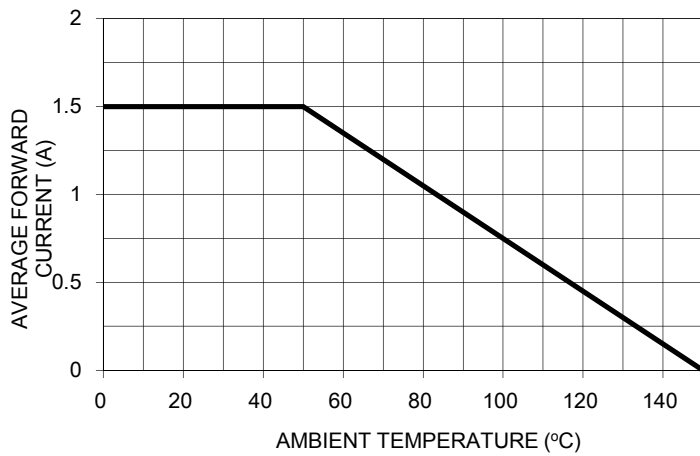


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

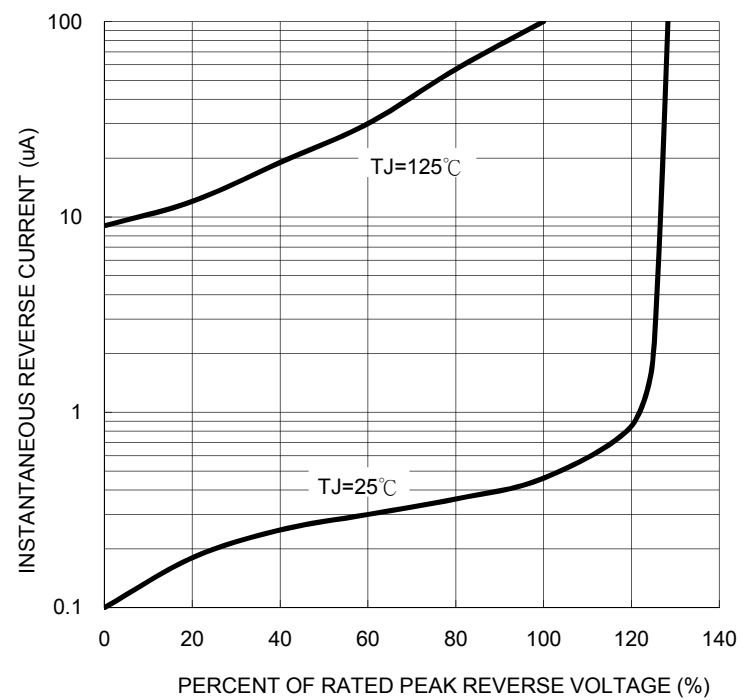


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

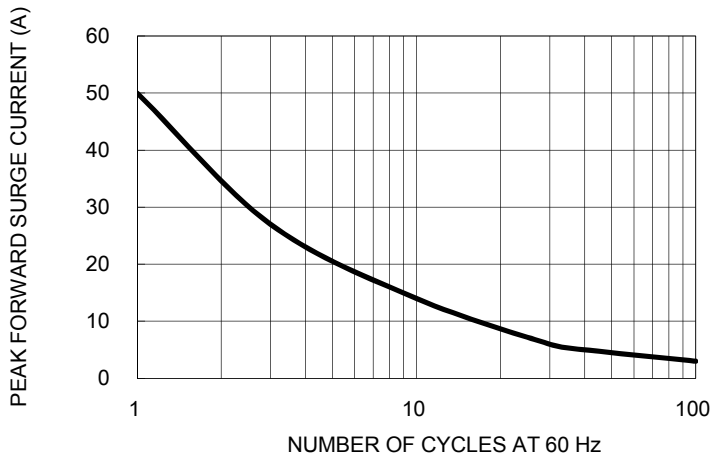


FIG. 4- TYPICAL FORWARD CHARACTERISTICS

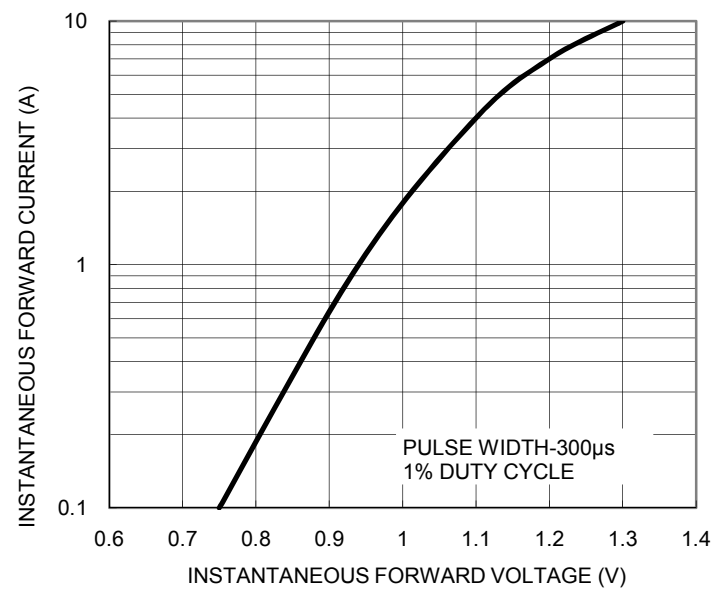
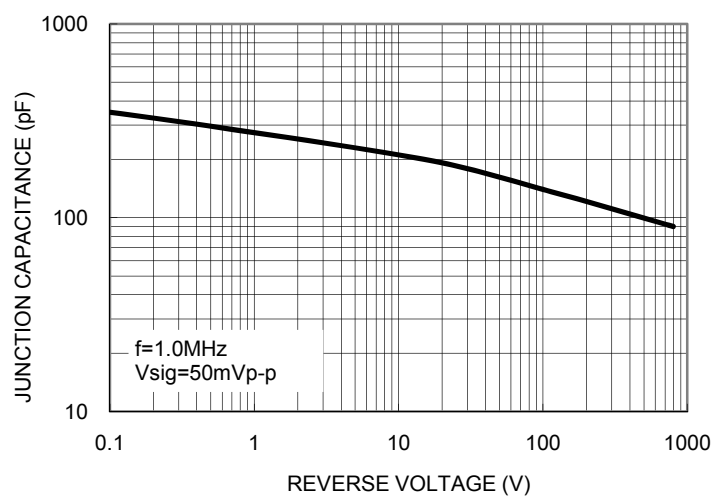
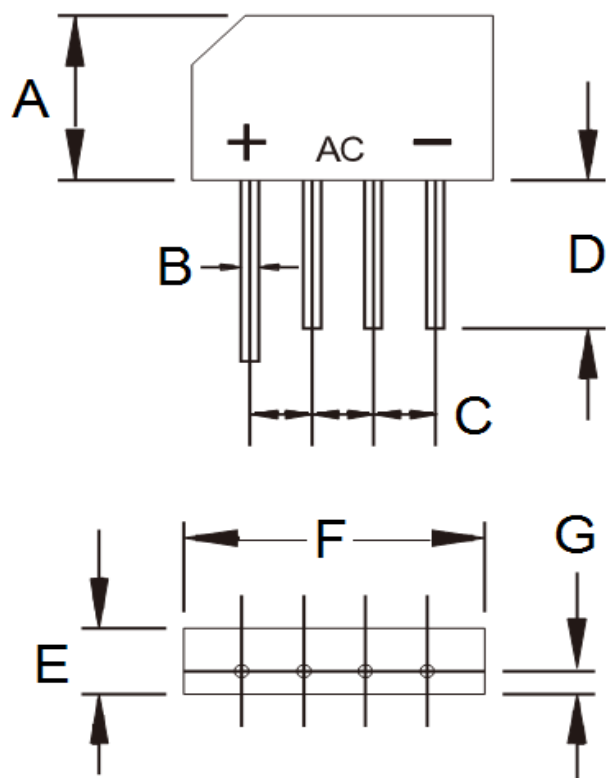


FIG. 5- TYPICAL JUNCTION CAPACITANCE

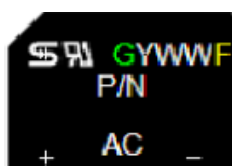


PACKAGE OUTLINE DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	10.60	11.68	0.417	0.460
B	0.70	0.90	0.028	0.035
C	3.60	4.10	0.142	0.161
D	12.70	-	0.500	-
E	3.70	3.90	0.146	0.154
F	14.22	15.24	0.560	0.600
G	1.27	-	0.050	-

MARKING DIAGRAM



- P/N = Specific Device Code
- G = Green Compound
- YW = Date Code
- F = Factory Code

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