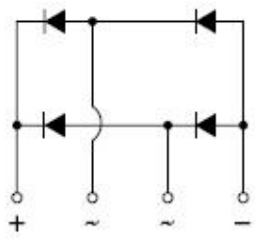
Glass Passivated Bridge Rectifiers

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

KBP



Pb-Free

RoHS COMPLIANT

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)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25℃ 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^2t	10.3							A^2s
Maximum instantaneous forward voltage (Note 1) I_F= 1.5 A	V_F	1.1							V
Maximum DC reverse current T_J=25 ℃ at rated DC blocking voltage T_J=125℃	I_R	10 500							μA
Typical thermal resistance	$R_{\theta jL}$ $R_{\theta jA}$	13 40							$^OC/W$
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=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℃ unless otherwise noted)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

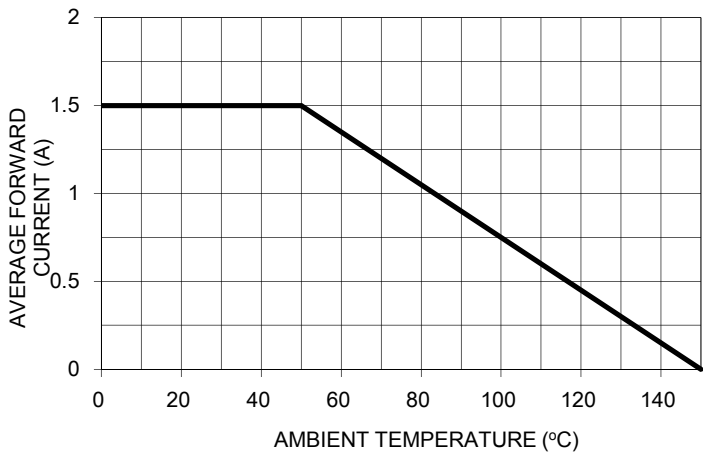


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

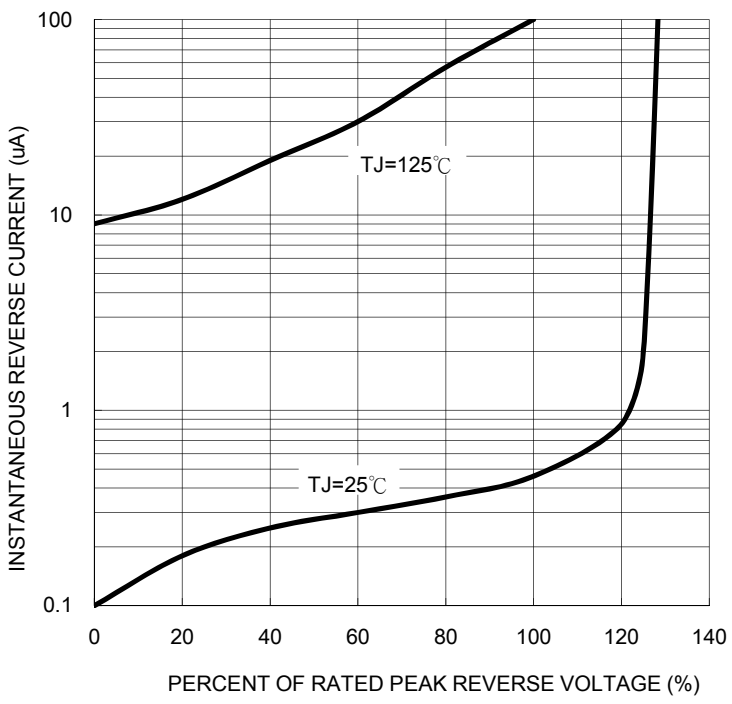


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

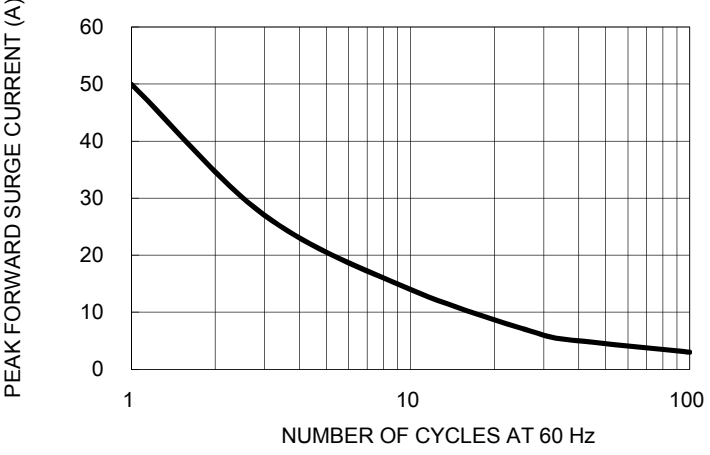


FIG. 4- TYPICAL FORWARD CHARACTERISTICS

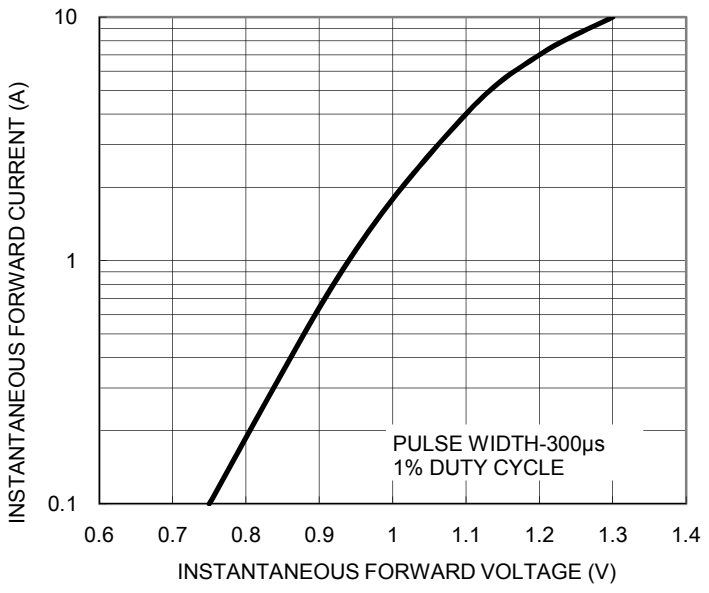
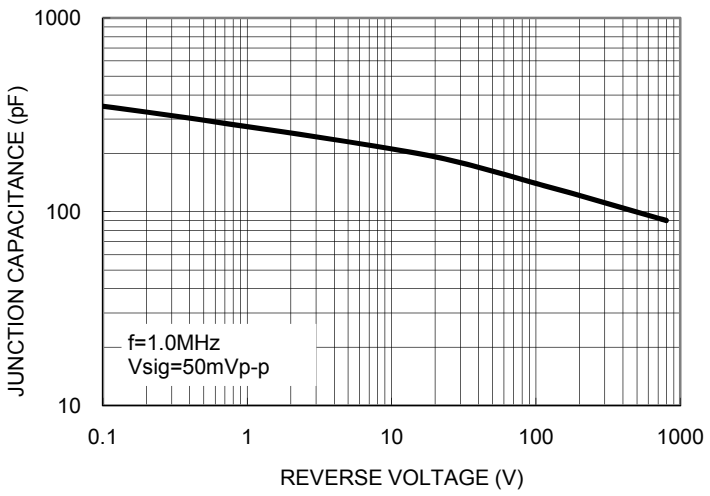
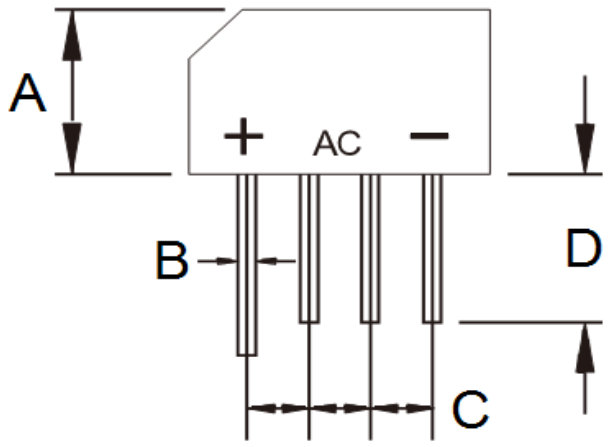
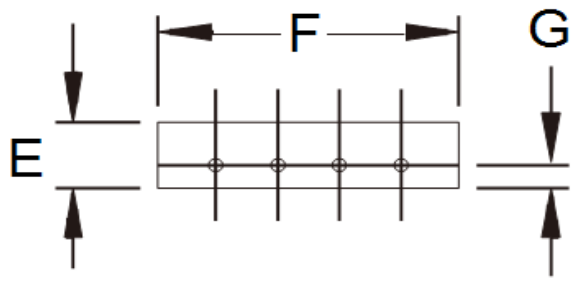


FIG. 5- TYPICAL JUNCTION CAPACITANCE



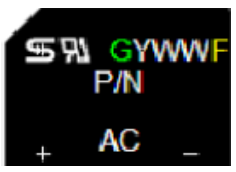
PACKAGE OUTLINE DIMENSIONS





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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