

GLASS PASSIVATED BRIDGE RECTIFIER

REVERSE VOLTAGE – 1000 Volts
FORWARD CURRENT – 4.0 Amperes

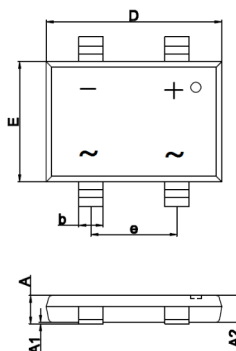
FEATURES

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- UL recognized file#E364304

MECHANICAL DATA

- Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.) "Halogen-free".
- Polarity: As marked on the body
- Weight: 389m grams (Approximate)

TT



TT			
DIM.	MIN.	TYP.	MAX.
A	1.45	1.65	1.80
A1	0.00	0.10	0.15
A2	1.45	1.55	1.65
C	0.15	0.25	0.35
D	10.05	10.20	10.35
E	6.85	7.00	7.15
E1	9.75	9.90	10.05
L	0.45	0.70	0.95
b	1.30	1.40	1.50
e	4.90	5.00	5.10
All dimension in millimetres.			

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	1000	V
Maximum DC blocking voltage	V_{DC}	1000	V
Average rectified output current per device	@ $T_A = 25^\circ\text{C}$ (Note3) $I_{(AV)}$	4.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	@ $T_A = 25^\circ\text{C}$ @ $T_A = 125^\circ\text{C}$ (Note1) I_{FSM}	120 96	A
Peak forward surge current 1ms single half sine-wave superimposed on rated load	@ $T_A = 25^\circ\text{C}$ @ $T_A = 125^\circ\text{C}$ (Note1) I_{FSM}	240 192	A
$I^2 t$ rating for fusing ($t = 8.3\text{ms}$)	$I^2 t$	59.7	A^2S
Operating and storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	TYP.	MAX.	UNIT
Forward voltage (Note1)	$I_F = 2\text{A}$ $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$ (Note1)	V_F	0.91 0.80	1.0 --	V
Leakage current	$V_R = 1000\text{V}$ $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$ (Note1)	I_R	0.06 19	5 200	μA
Typical junction capacitance (Note2)		C_J	35		pF

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP.	UNIT
Typical Thermal Resistance (without Heatsink)	R_{thJC} R_{thJL} R_{thJA}	8 10 60	$^\circ\text{C/W}$
Typical thermal resistance (Note3)	R_{thJC} R_{thJL} R_{thJA}	3 6 15	$^\circ\text{C/W}$

Note :

- (1) Perform static test after the temperature of oven is steady 20 minutes.
- (2) Measured at 1.0MHz and applied reverse voltage of 4.0V DC
- (3) Thermal resistance junction to case, lead and ambient in accordance with JESD-51.
Unit mounted on 15mmx12mmx1.6mm AL Pad attached on 40mmx30mmx24mm Fin heatsink.

REV.2, Oct-2019, KBDA50

RATING AND CHARACTERISTIC CURVES TT4M



FIG.1- FORWARD CURRENT DERATING CURVE

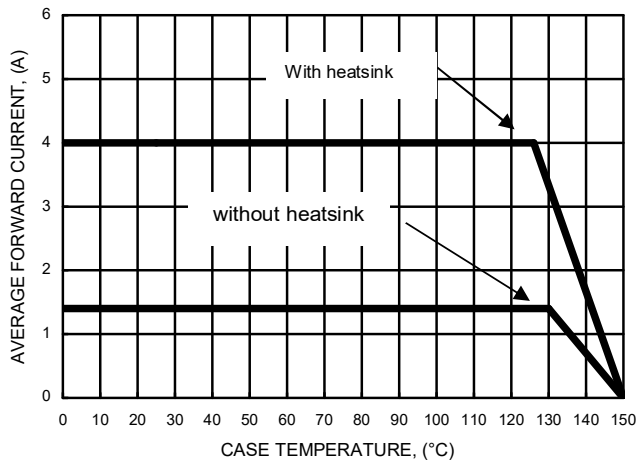


FIG.2- FORWARD CURRENT DERATING CURVE

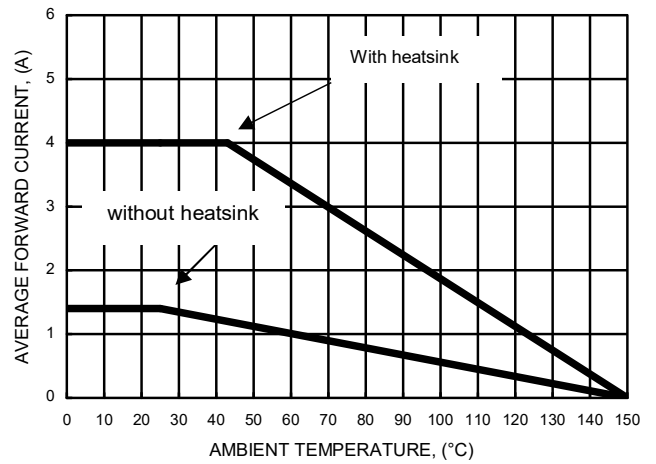


FIG.3- MAXIMUM NON-REPETITIVE SURGE CURRENT

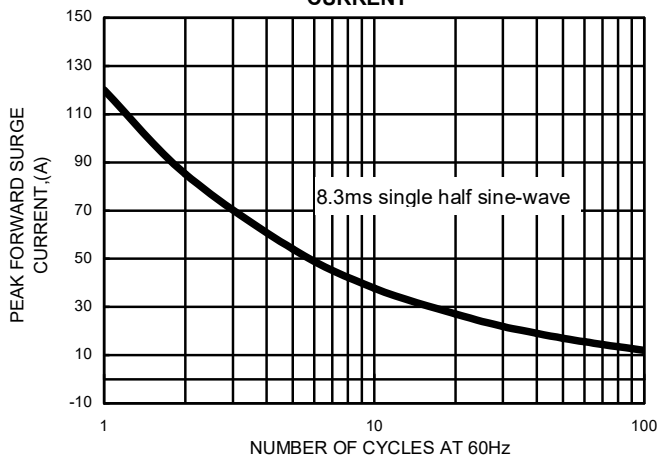


FIG.4- TYPICAL FORWARD CHARACTERISTICS

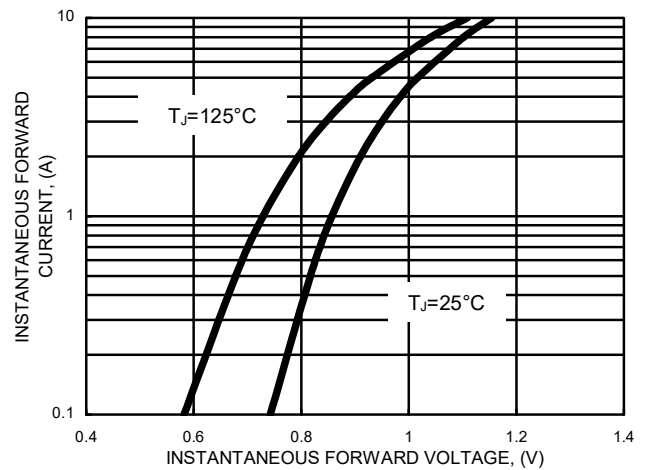


FIG.5- TYPICAL JUNCTION CAPACITANCE

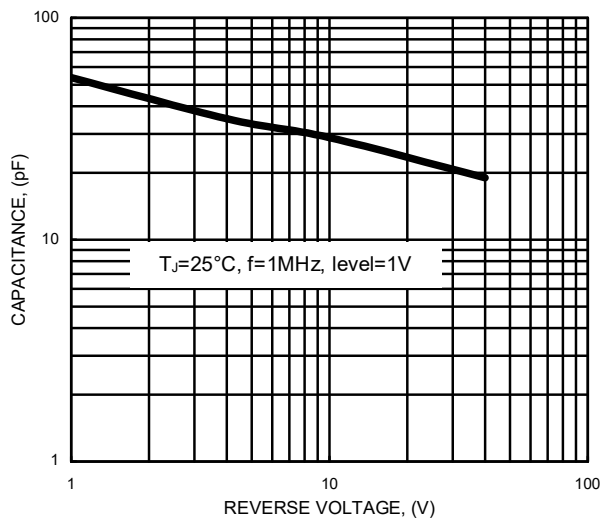
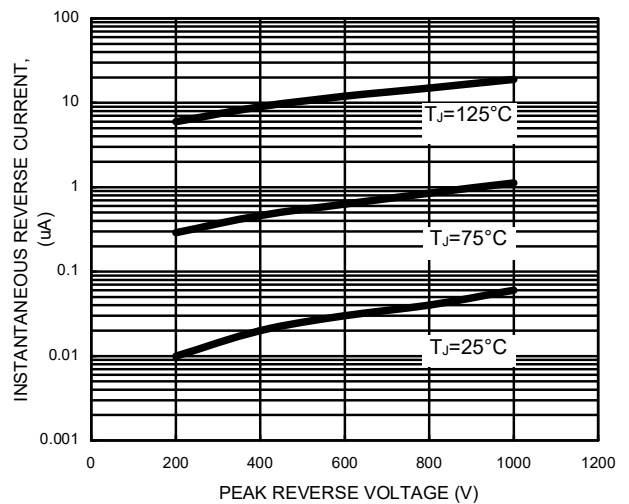


FIG.6- TYPICAL REVERSE CHARACTERISTICS



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