

**GLASS PASSIVATED  
SURFACE MOUNT BRIDGE RECTIFIER**

**REVERSE VOLTAGE – 1000 Volts  
FORWARD CURRENT – 1.0 Ampere**

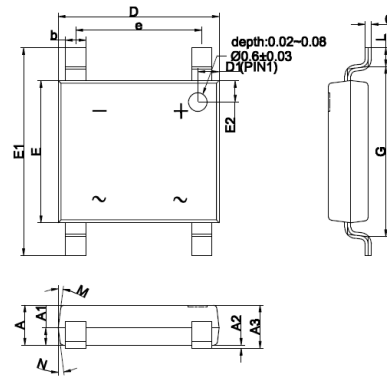
**FEATURES**

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

**MECHANICAL DATA**

- Case Material: "Green" molding compound, UL flammability classification 94V-0,(No Br. Sb. Cl.) "Halogen-free"
- UL recognized file # E364304
- Polarity indicator: As marked on the body
- Weight: 98 mg ( Approximate)
- Marking Code: ABS10M

**ABS**



ABS		
DIM	MIN	MAX
A	1.20	1.30
A1	0.43	0.63
A2	0.00	0.10
A3	1.20	1.40
b	0.50	0.80
C	0.10	0.30
D	4.85	5.25
D1	0.45	0.85
e	3.80	4.20
E	4.25	4.65
E1	6.40	6.80
E2	0.45	0.85
G	5.20	5.60
L	0.40	0.80
M	7° TYP.	
N	7° TYP.	
All dimension in millimeter		

**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	$I_{(AV)}$	1.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	30 24	A
Peak forward surge current 1ms single half sine-wave superimposed on rated load	$I_{FSM}$	60 48	A
$I^2 t$ rating for fusing ( $t = 8.3ms$ )	$I^2 t$	2.39	A <sup>2</sup> S
Operating and storage temperature range	$T_J, T_{STG}$	-55 to +150	°C

**STATIC ELECTRICAL CHARACTERISTICS**

PARAMETER	TEST CONDITION	SYMBOL	MAX.	UNIT
Forward voltage (Note1)	$I_F = 0.5A$ $T_A = 25^\circ C$	$V_F$	0.95	V
Leakage current	$V_R = 1000V$ $T_A = 25^\circ C$ $T_A = 125^\circ C$ (Note1)	$I_R$	10 100	$\mu A$
Typical junction capacitance (Note 2)		$C_J$	7.8	pF

**THERMAL CHARACTERISTICS**

PARAMETER	SYMBOL	TYP.	UNIT
Typical thermal resistance (Note 3)	$R_{thJC}$ $R_{thJA}$ $R_{thJA}$	5 17 48	°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 glass-epoxy substrate with 1oz/ft<sup>2</sup> 20x20 mm copper pad per pin with heatsink

# RATING AND CHARACTERISTIC CURVES ABS10M



FIG.1- FORWARD CURRENT DERATING CURVE

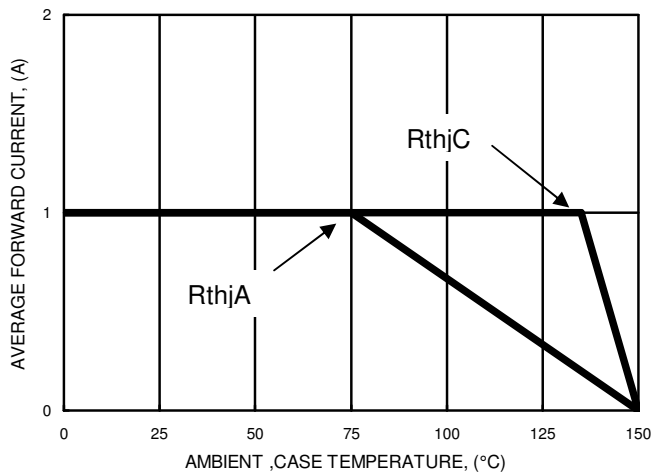


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

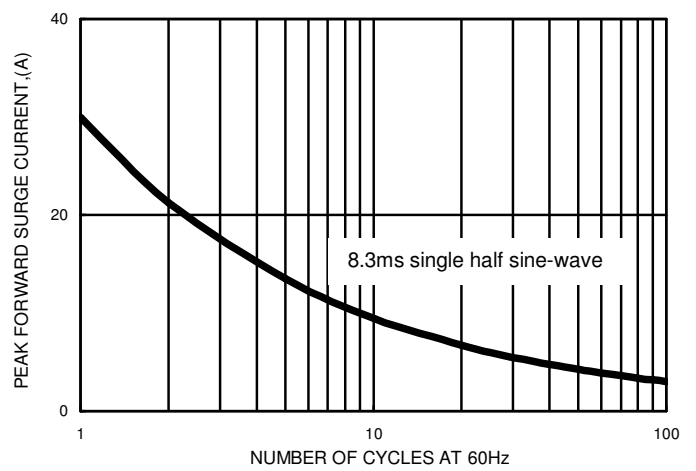


FIG.3- TYPICAL FORWARD CHARACTERISTICS

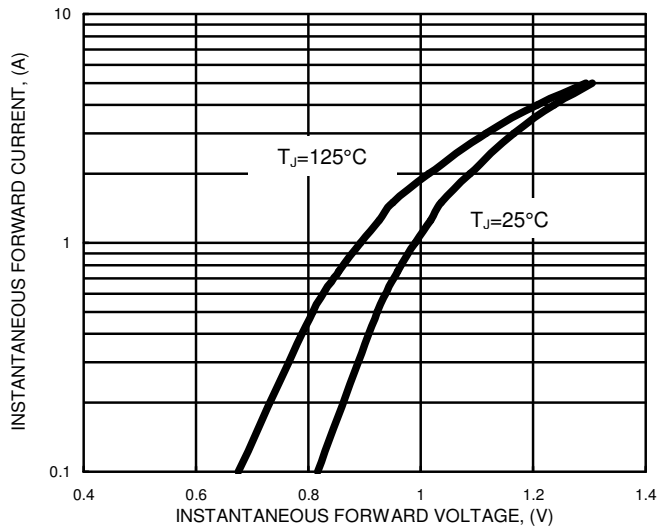


FIG.4- TYPICAL JUNCTION CAPACITANCE

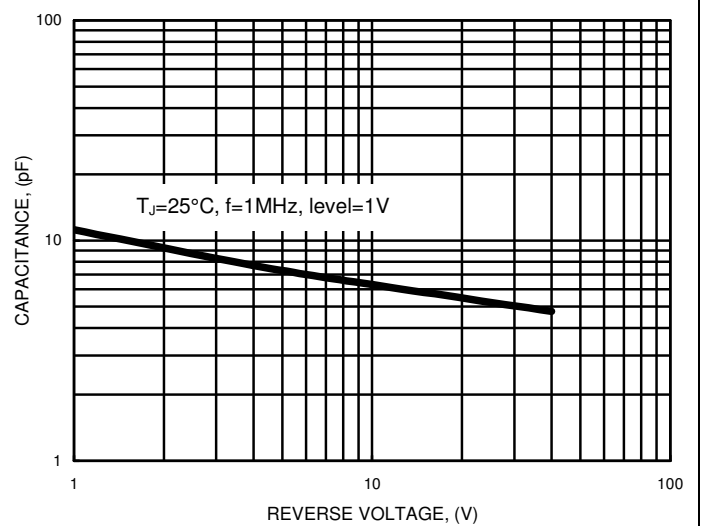
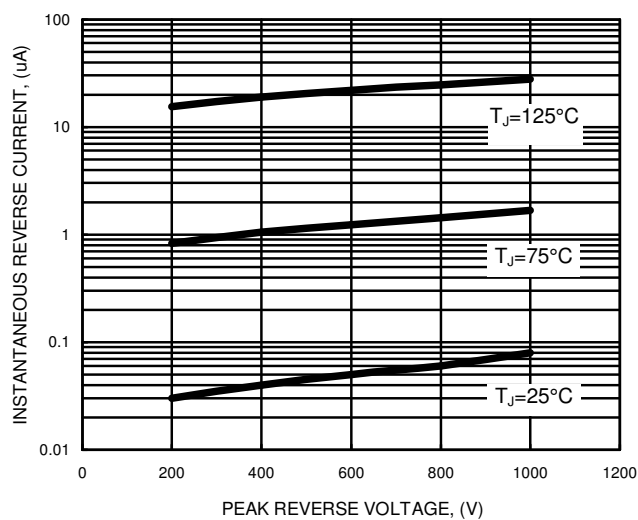


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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