Surface Mount Glass Passivated Bridge Rectifier

Voltage	1000 V	Current	1A

ABS

Features

- Glass passivated chip junction
- Ideally suited for automatic assembly
- Save space on printed circuit boards
- Ultra thin profile package for space constrained utilization
- Low forward voltage drop
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : ABS Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0031 ounces, 0.088 grams

Application

- Quick Charger (<20W)
- General power adapter (<30W)
- In-door Led lighting, Bulb/ PAR lighting
- Netcom power (<35W)
- Smart speaker adapter(<20W)

Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER		SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	1000	V
Maximum RMS Voltage		V_{RMS}	700	V
Maximum DC Blocking Voltage		V_{DC}	1000	V
Maximum Average Forward Current		$I_{F(AV)}$	1	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ T_A = 25 °C @ T_A = 125 °C	I_{FSM}	35 28	A
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	@ T_A = 25 °C @ T_A = 125 °C	I_{FSM}	70 56	A
I^2t rating for fusing (t = 8.3ms)		I^2t	5.08	A^2S
Typical Junction Capacitance Measured at 1 MHZ And Applied V_R = 4 V (Note 1)		C_J	13	pF
Typical Thermal Resistance (Note 2)		$R_{\theta JC}$	33	°C/W
Operating Junction Temperature Range		T_J	-55~150	°C
Storage Temperature Range		T_{STG}	-55~150	°C

Electrical Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	I_F = 1 A, T_J = 25 °C	-	-	1.1	V
Reverse Current	I_R	V_R = 1000 V, T_J = 25 °C	-	-	5	uA
		V_R = 1000 V, T_J = 125 °C	-	-	100	

NOTES :

1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
2. Mounted on glass epoxy PC board with 100x100x1.6mm copper pad area.

TYPICAL CHARACTERISTIC CURVES

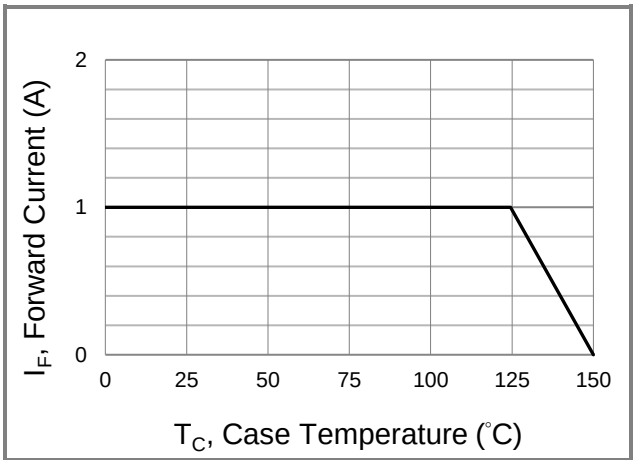


Fig.1 Forward Current Derating Curve

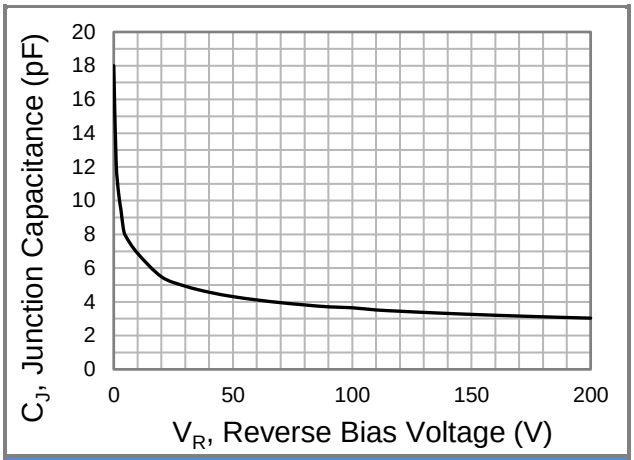


Fig.2 Typical Junction Capacitance

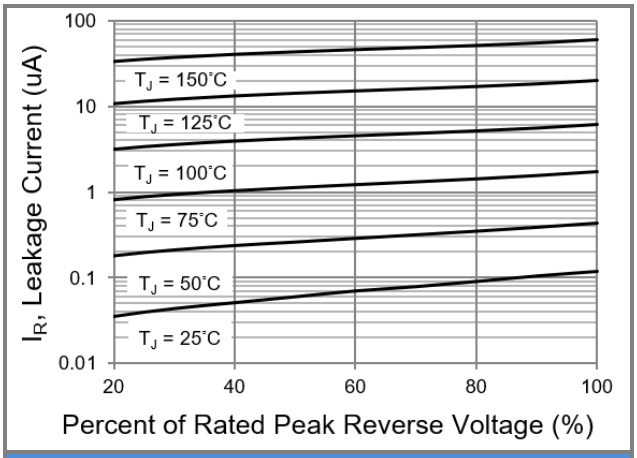


Fig.3 Typical Reverse Characteristics

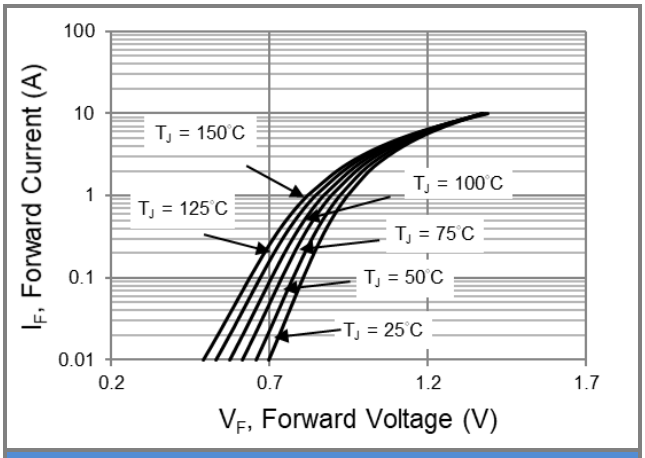


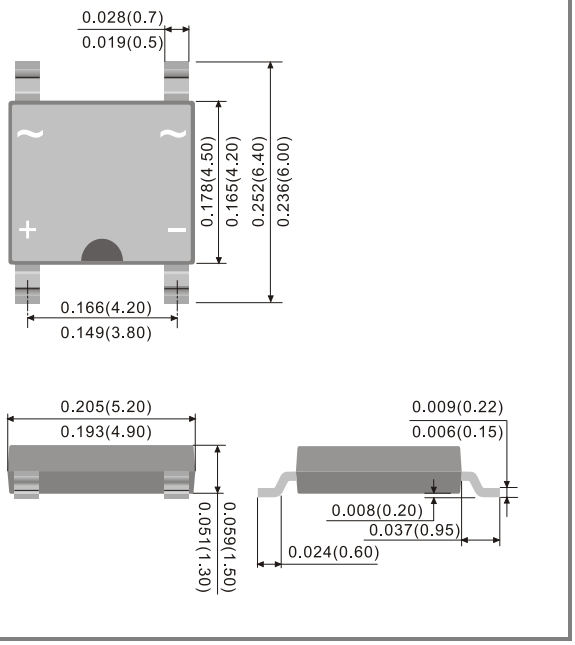
Fig.4 Typical Forward Characteristics

Product and Packing Information

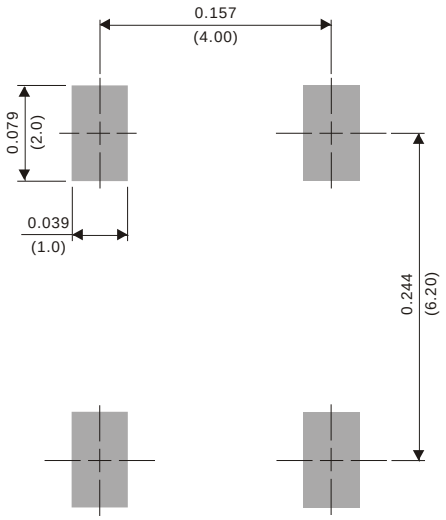
Part No.	Package Type	Packing Type	Marking
ABS1M	ABS	4K pcs / 13” reel	ABS1M

Packaging Information & Mounting Pad Layout

ABS Dimension — Unit: inch(mm)



ABS Pad Layout — Unit: inch(mm)



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