

Surface Mount Glass Passivated Bridge Rectifier

Voltage

1000 V

Current

1A

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)

ABS



Maximum Ratings and Thermal Characteristics ($T_A = 25\text{ }^\circ\text{C}$ 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	@ $T_A = 25\text{ }^\circ\text{C}$ @ $T_A = 125\text{ }^\circ\text{C}$ I_{FSM}	35 28	A
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	@ $T_A = 25\text{ }^\circ\text{C}$ @ $T_A = 125\text{ }^\circ\text{C}$ I_{FSM}	70 56	A
$I^2 t$ rating for fusing ($t = 8.3\text{ms}$)	$I^2 t$	5.08	A^2S
Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4\text{ V}$ (Note 1)	C_J	13	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	33	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	-55~150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55~150	$^\circ\text{C}$

Electrical Characteristics ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	$I_F = 1\text{ A}$, $T_J = 25\text{ }^\circ\text{C}$	-	-	1.1	V
Reverse Current	I_R	$V_R = 1000\text{ V}$, $T_J = 25\text{ }^\circ\text{C}$	-	-	5	μA
		$V_R = 1000\text{ V}$, $T_J = 125\text{ }^\circ\text{C}$	-	-	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

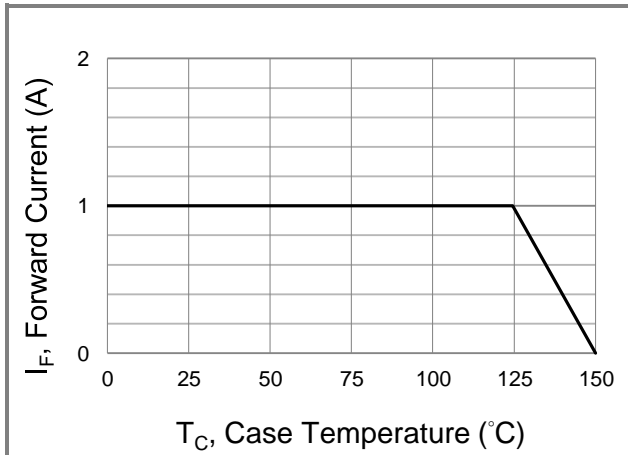


Fig.1 Forward Current Derating Curve

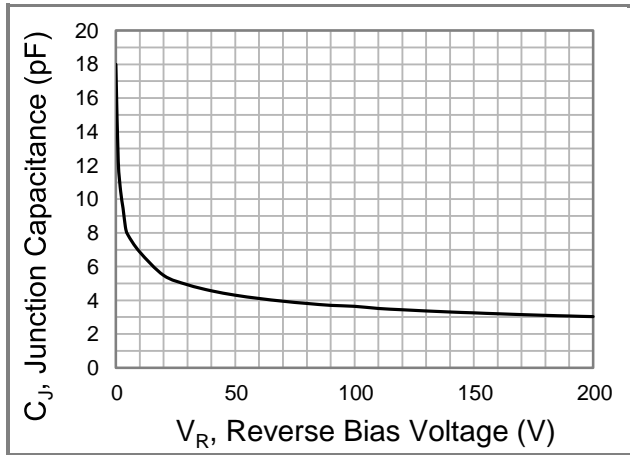


Fig.2 Typical Junction Capacitance

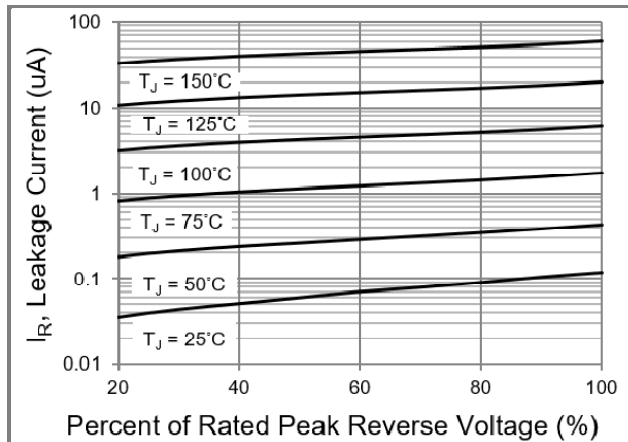


Fig.3 Typical Reverse Characteristics

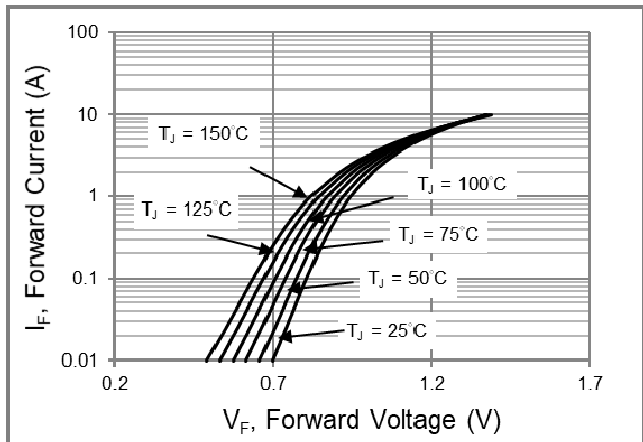
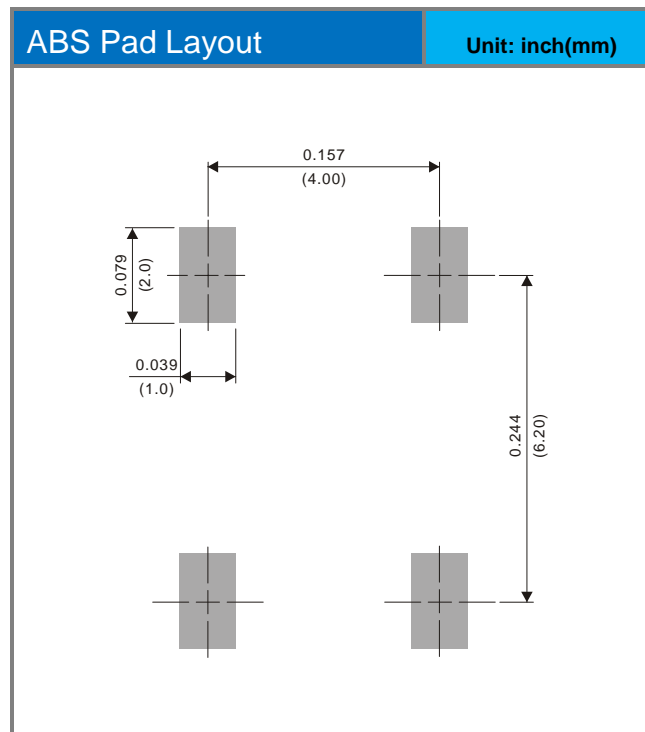
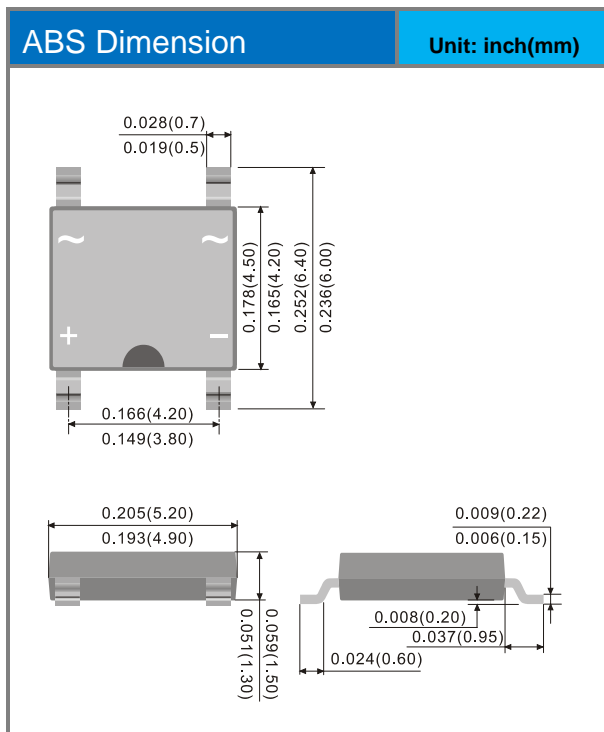


Fig.4 Typical Forward Characteristics

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking
ABS1M_R2_00101	ABS	4K pcs / 13" reel	ABS1M

Packaging Information & Mounting Pad Layout



Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.