

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Features

- ◆ Glass Passivated Chip Junction
- ◆ Reverse Voltage - 200 to 1000 V
- ◆ Forward Current - 1 A
- ◆ High surge current capability
- ◆ Designed for Surface Mount Application



Mechanical Data

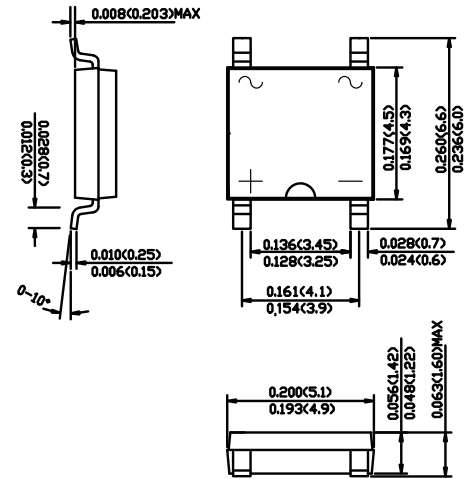
Case : JEDEC ABS Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.0031 ounce, 0.098 grams



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	ABS2	ABS4	ABS6	ABS8	ABS10	UNITS
		MDD ABS2	MDD ABS4	MDD ABS6	MDD ABS8	MDD ABS10	
Marking Code							
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Average Rectified Output Current at $T_c = 125^\circ\text{C}$	$I_{F(AV)}$	1.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35					A
Maximum instantaneous forward voltage drop per leg at 1A	V_F	1.1					V
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_A=25^\circ\text{C}$ 5					uA
		$T_A=100^\circ\text{C}$ 50					
		$T_A=125^\circ\text{C}$ 100					
Typical thermal resistance (Note2)	$R_{\theta JA}$	72					°C/W
	$R_{\theta JC}$	20					
Typical Junction capacitance (Note1)	C_J	13					pF
Operating and storage temperature range	T_J, T_{STG}	-55 to +150					°C

NOTES:1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with $4 \times 1.5'' \times 1.5''$ (3.81×3.81 cm) copper pad.

Ratings And Characteristic Curves

Fig.1 Average Rectified Output Current Derating Curve

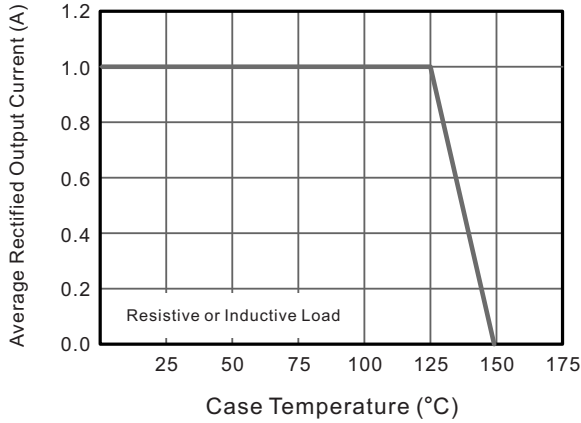


Fig.2 Typical Reverse Characteristics

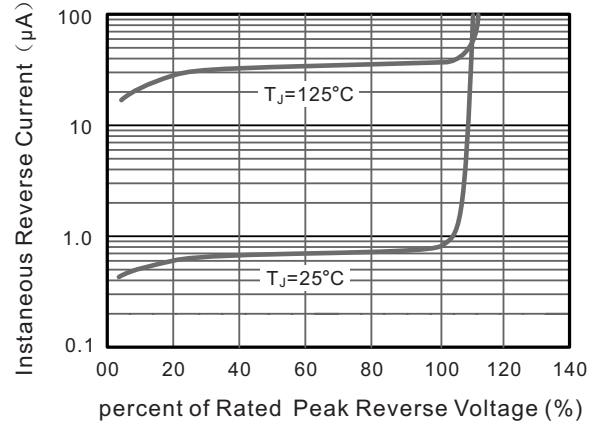


Fig.3 Typical Instantaneous Forward Characteristics

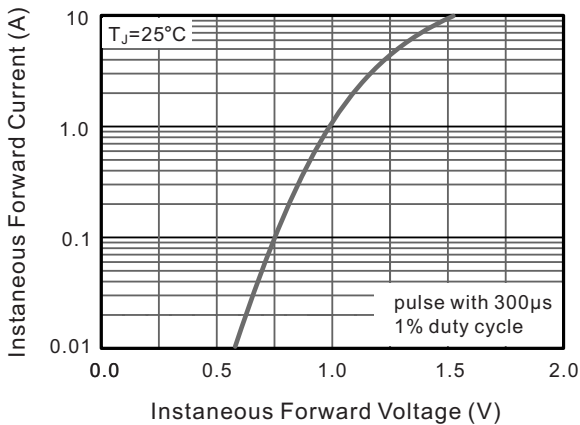


Fig.4 Typical Junction Capacitance

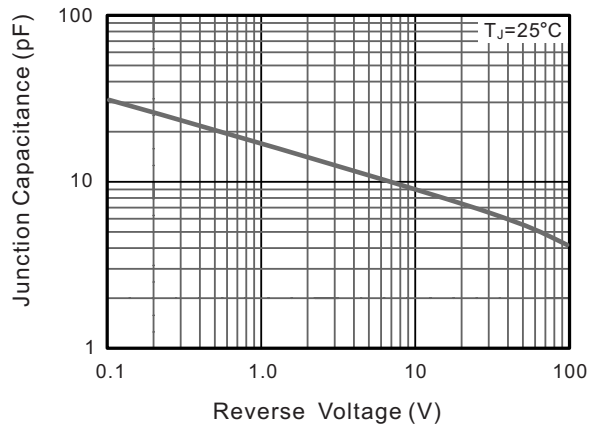
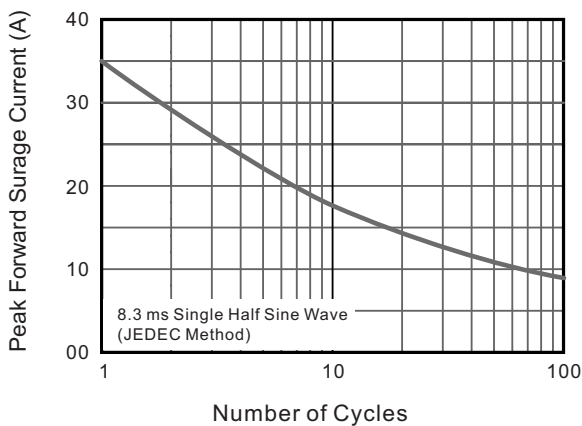
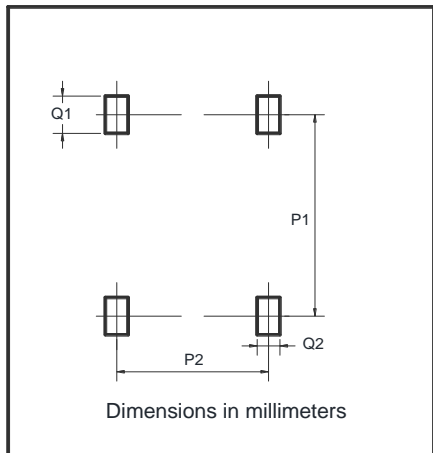


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



The curve above is for reference only.

Suggested Pad Layout



Dim	Min
P1	5.72
P2	4.00
Q1	1.00
Q2	0.90

Important Notice and Disclaimer

Microdiode Electronics (Shenzhen) reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

Microdiode Electronics (Shenzhen) makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Microdiode Electronics (Shenzhen) assume any liability for application assistance or customer product design. Microdiode Electronics (Shenzhen) does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of Microdiode Electronics (Shenzhen).

Microdiode Electronics (Shenzhen) products are not authorized for use as critical components in life support devices or systems without express written approval of Microdiode Electronics (Shenzhen).