



# ABS2 THRU ABS10

Voltage Range - 200 to 1000 V olts Current - 1.0 Ampere

## 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

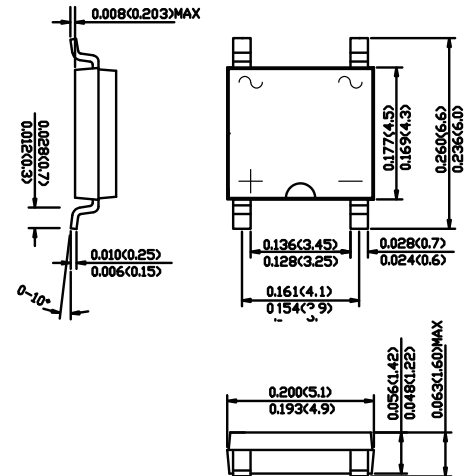
**Case** : JEDEC ABS Molded plastic body

**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<br>ABS2                    | MDD<br>ABS4 | MDD<br>ABS6 | MDD<br>ABS8 | MDD<br>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<br>at $T_c = 125^\circ\text{C}$  | $I_{F(AV)}$     | 1.0                            |             |             |             |              | A     |
| Peak forward surge current,<br>8.3ms single half sine-wave superimposed on<br>rated load (JEDEC Method) | $I_{FSM}$       | 35                             |             |             |             |              | A     |
| Maximum instantaneous forward voltage drop<br>per leg at 1A   | $V_F$           | 1.1                            |             |             |             |              | V     |
| Maximum DC reverse current<br>at rated DC blocking voltage  | $I_R$           | $T_A=25^\circ\text{C}$<br>5    |             |             |             |              | uA    |
|   |                 | $T_A=100^\circ\text{C}$<br>50  |             |             |             |              |       |
|   |                 | $T_A=125^\circ\text{C}$<br>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    |

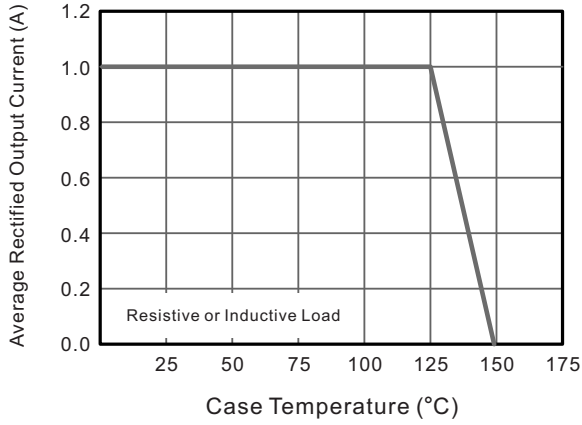
NOTES:1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

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

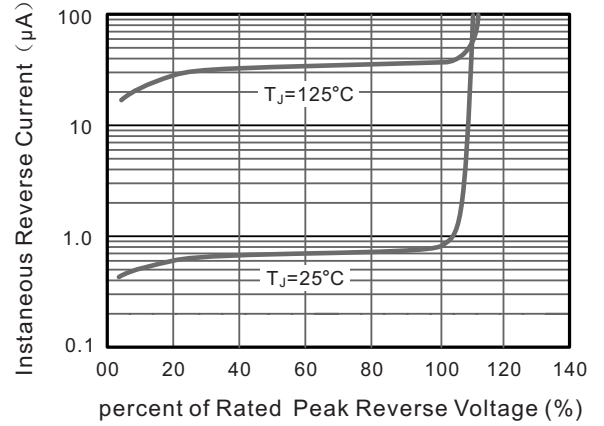


## Ratings And Characteristic Curves

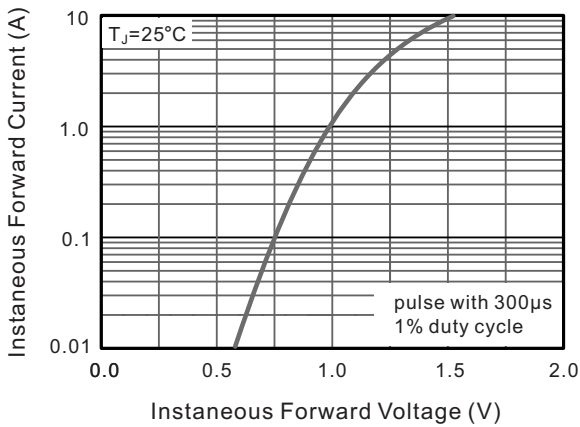
**Fig.1 Average Rectified Output Current Derating Curve**



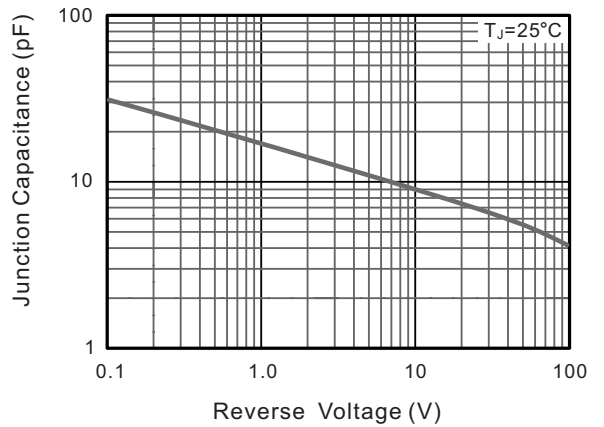
**Fig.2 Typical Reverse Characteristics**



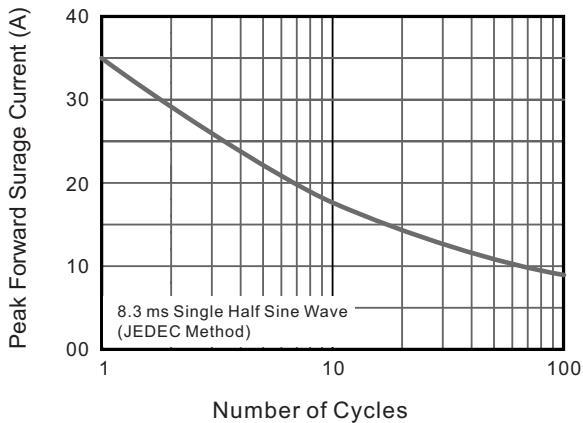
**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



The curve above is for reference only.