

1A SURFACE MOUNT GLASS PASSIVATED BRIDGE

RECTIFIER Reverse Voltage - 100 to 1000 V

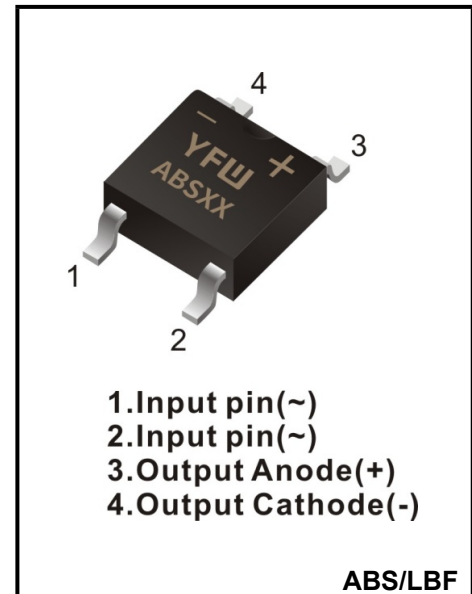
Forward Current - 1.2 A

FEATURES

- ♦High current capability
- ♦Low forward voltage drop
- ♦Glass Passivated Chip Junction
- ♦Low power loss, high efficiency
- ♦Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ♦Case: ABS/LBF
- ♦Terminals: Solderable per MIL-STD-750, Method 2026
- ♦Approx. Weight: 88mg / 0.0031oz



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

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

| Parameter | Symbols | ABS1-50 | ABS2-50 | ABS4-50 | ABS6-50 | ABS8-50 | ABS10-50 | Units |
|---|---------------------------------|----------------|---------|---------|---------|---------|----------|---------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Average Rectified Output Current at $T_c = 125^{\circ}C$ | I_o | 1.2 | | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC method) | I_{FSM} | 40 | | | | | | A |
| Forward Voltage per element @ $I_F = 1.0A$ | V_F | 1.1 | | | | | | V |
| Maximum DC Reverse Current @ $T_A = 25^{\circ}C$ at Rated DC Blocking Voltage @ $T_A = 100^{\circ}C$ @ $T_A = 125^{\circ}C$ | I_R | 5 50 100 | | | | | | μA |
| Typical Junction Capacitance (Note1) | C_j | 13 | | | | | | pF |
| Typical Thermal Resistance (Note2) | $R_{\theta JA} / R_{\theta JC}$ | 72/20 | | | | | | $^{\circ}C/W$ |
| Operating and Storage Temperature Range | T_j, T_{stg} | -55 ~ +150 | | | | | | $^{\circ}C$ |

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

Ratings And Characteristic Curves

Fig.1 Average Rectified Output Current Derating Curve

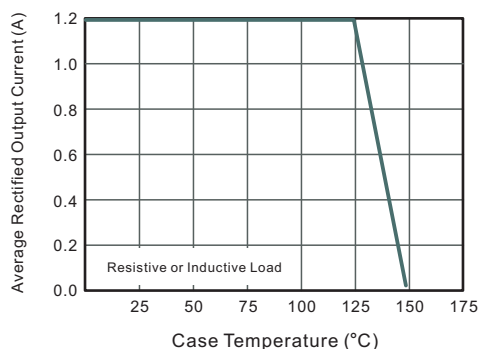


Fig.2 Typical Reverse Characteristics

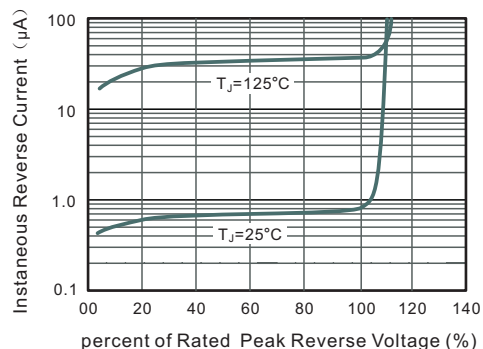


Fig.3 Typical Instantaneous Forward Characteristics

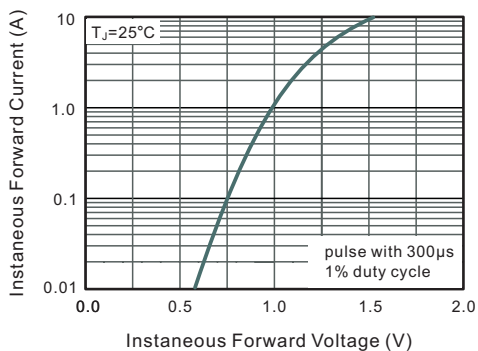


Fig.4 Typical Junction Capacitance

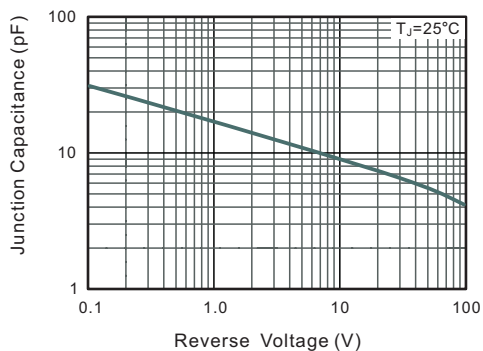
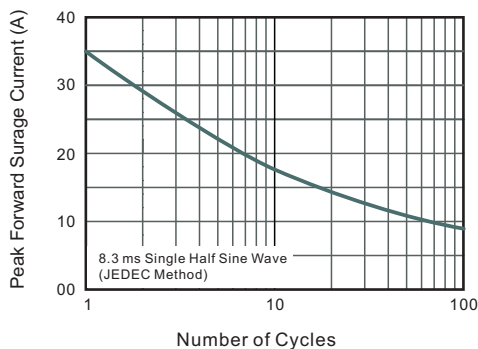
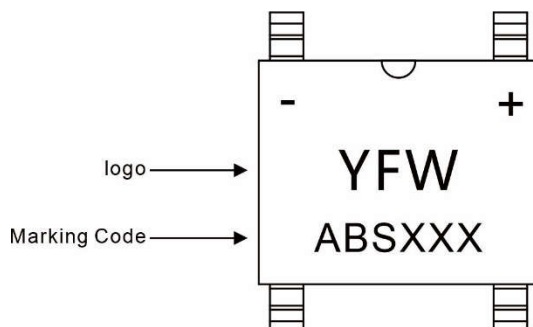


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Marking Diagram

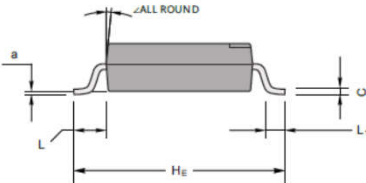
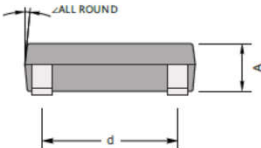
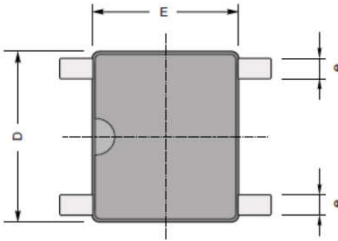


Ordering information

| Package | Packing Description | Packing Quantity |
|----------|---------------------|------------------------------|
| ABS(LBF) | Tape/Reel, 13" reel | 5000PCS/Reel 50000PCS/Carton |

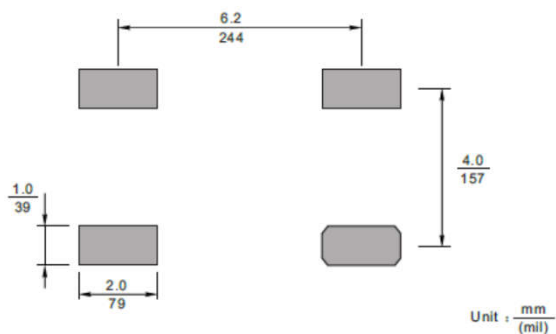
Package Dimensions

ABS(LBF)

| | |
|---|---|
|  |  |
|  | |

| Dim. | Millimeter(mm) | | (mil) | |
|------|----------------|------|-------|------|
| | Min. | Max. | Min. | Max. |
| A | 1.3 | 1.5 | 51 | 59 |
| C | 0.15 | 0.22 | 5.9 | 8.7 |
| D | 4.9 | 5.2 | 193 | 205 |
| E | 4.2 | 4.5 | 166 | 177 |
| HE | 6.0 | 6.4 | 236 | 252 |
| d | 3.8 | 4.2 | 150 | 165 |
| e | 0.5 | 0.7 | 20 | 28 |
| L | 0.95 | | 37 | |
| L1 | 0.6 | | 24 | |
| a | 0.2 | | 8 | |
| ∠ | 7° | | | |

The recommended mounting pad size



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