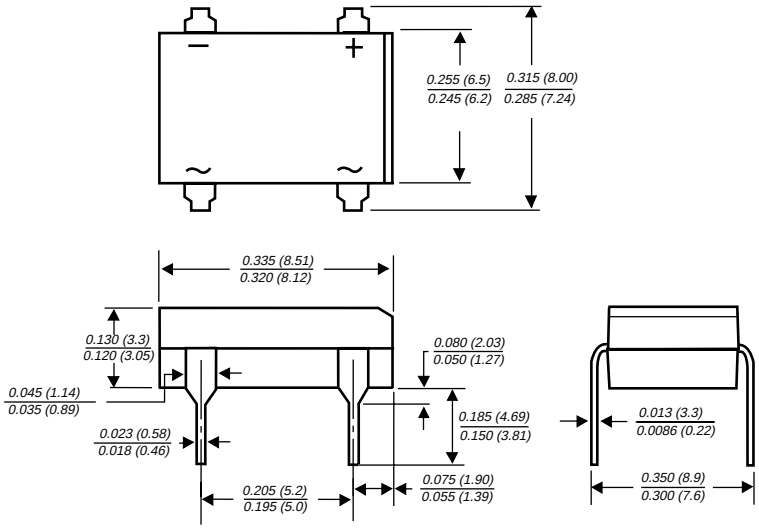
# Miniature Glass Passivated Ultrafast Bridge Rectifier

**Reverse Voltage** 50 and 200V
**Forward Current** 1.0A

**Case Style DFM**




*Dimensions in inches and (millimeters)*

## Features

- Plastic package used has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL listed under Recognized Component Index, file number E54214
- Glass passivated chip junction
- High forward surge current capability
- Ideal for printed circuit boards
- Superfast recovery times for high efficiency
- High temperature soldering guaranteed: 260°C/10 seconds, at 5 lbs. (2.3kg) tension

## Mechanical Data

**Case:** Molded plastic body over passivated junctions

**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026

**Polarity:** Polarity symbols as marked on body

**Mounting Position:** Any

**Weight:** 0.014 oz., 0.4 g

**Packaging codes/options:**
45/50 ea. per Bulk Tube

## Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter | Symbol | EDF1AM | EDF1BM | EDF1CM | EDF1DM | Unit |
|---|---|---|---|---|---|---|
| Maximum repetitive peak reverse voltage | $V_{RRM}$ | 50 | 100 | 150 | 200 | V |
| Maximum RMS voltage | $V_{RMS}$ | 35 | 70 | 106 | 140 | V |
| Maximum DC blocking voltage | $V_{DC}$ | 50 | 100 | 150 | 200 | V |
| Maximum average forward output rectified current at $T_A$ = 40°C | $I_{F(AV)}$ | 1.0 | | | | A |
| Peak forward surge current single half sine-wave super-imposed on rated load (JEDEC Method) $T_J$ = 150°C | $I_{FSM}$ | 50 | | | | A |
| Rating for fusing (t < 8.3ms) | $I^2t$ | 10 | | | | $A^2$sec |
| Typical thermal resistance per leg (Note 1) | $R_{\theta JA}$<br>$R_{\theta JL}$ | 38<br>12 | | | | °C/W |
| Operating junction and storage temperature range | $T_J$, $T_{STG}$ | –55 to +150 | | | | °C |

## Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter | | Symbol | EDF1AM | EDF1BM | EDF1CM | EDF1DM | Unit |
|---|---|---|---|---|---|---|---|
| Max. instantaneous forward voltage drop per leg at 1.0A | | $V_F$ | 1.05 | | | | V |
| Maximum reverse current<br>at rated DC blocking voltage | $T_A$ = 25°C<br>$T_A$ = 125°C | $I_R$ | 5.0<br>1.0 | | | | µA<br>mA |
| Maximum reverse recovery time at $I_F$ = 0.5A, $I_R$ = 1.0A, $I_{rr}$ = 0.25A | | $t_{rr}$ | 50 | | | | ns |

**Note:** (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.51 x 0.51" (13 x 13mm) copper pads

## Ratings and Characteristic Curves ($T_A$ = 25°C unless otherwise noted)

**Fig. 1 - Derating Curves Output Rectified Current**

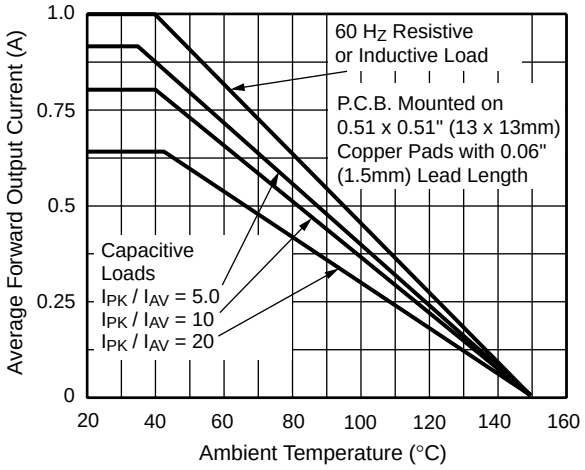



**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current**

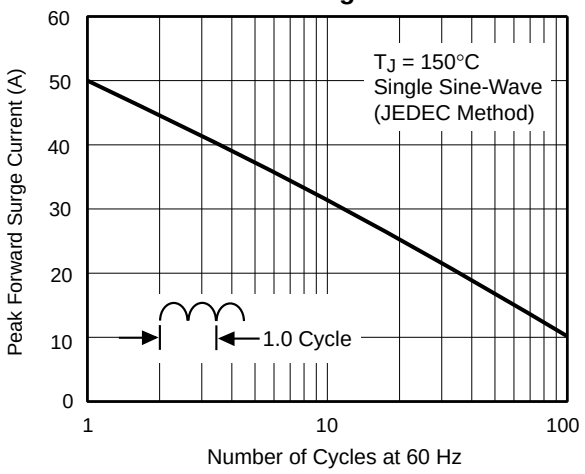



**Fig. 3 - Typical Forward Characteristics Per Leg**

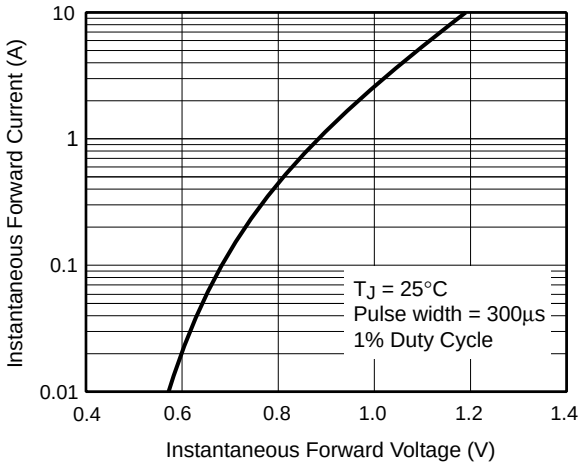



**Fig. 4 - Typical Reverse Leakage Characteristics Per Leg**

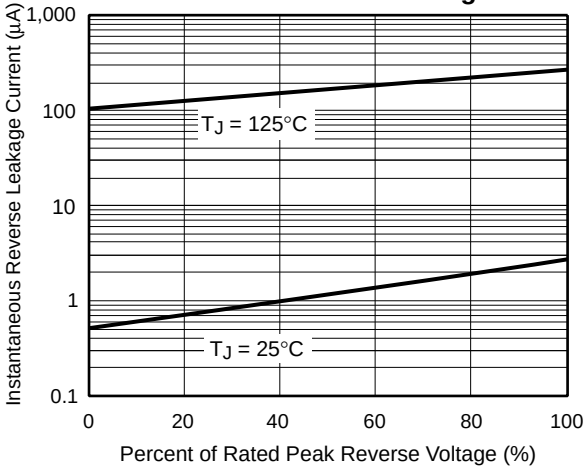



**Fig. 5 - Typical Junction Capacitance Per Leg**