



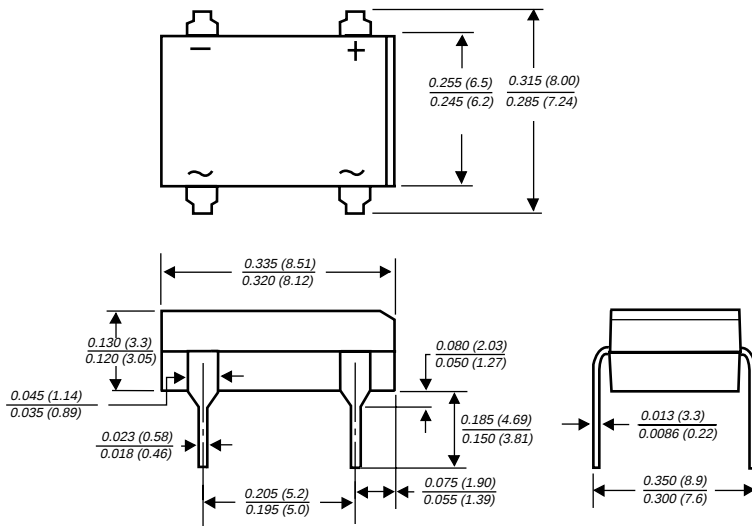
EDF1AM thru EDF1DM

Vishay Semiconductors
formerly General Semiconductor

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 superimposed on rated load (JEDEC Method) T _J = 150°C	I _{FSM}	50				A
Rating for fusing (t < 8.3ms)	I ² t	10				A ² sec
Typical thermal resistance per leg (Note 1)	R _{θJA} R _{θJL}	38 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 T _A = 25°C at rated DC blocking voltage T _A = 125°C	I _R	5.0 1.0				μA 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

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Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig. 1 - Derating Curves Output Rectified Current

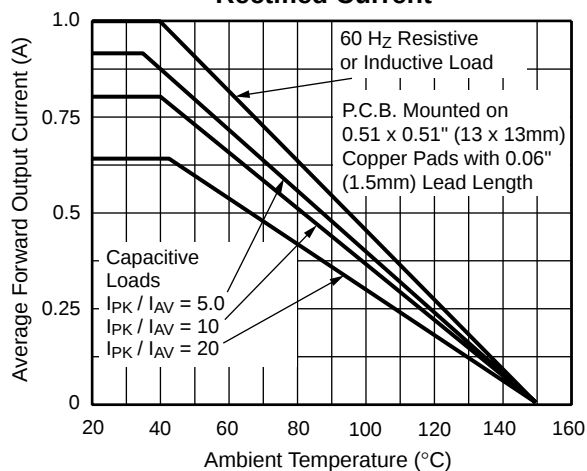


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

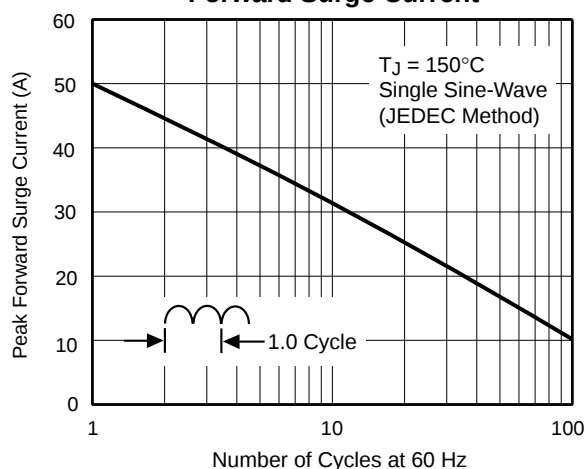


Fig. 3 - Typical Forward Characteristics Per Leg

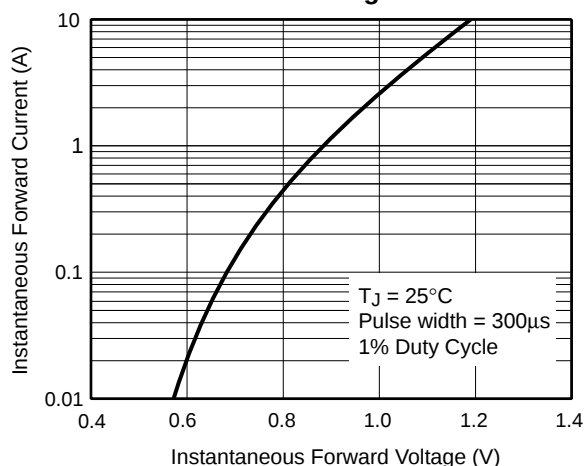


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

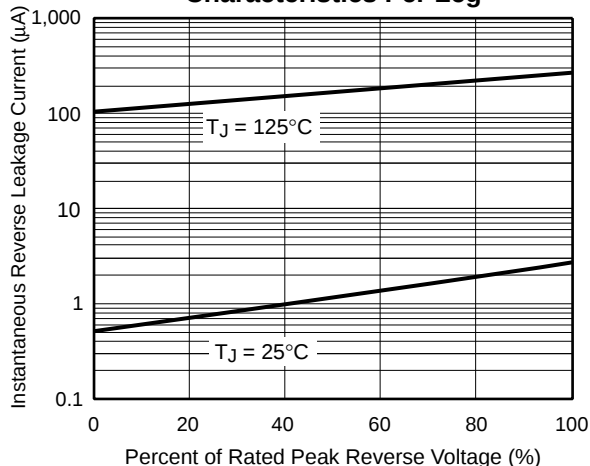


Fig. 5 - Typical Junction Capacitance Per Leg

