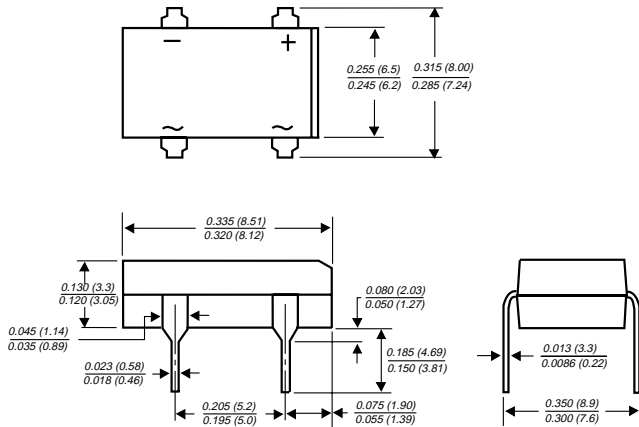


# EDF1AM THRU EDF1DM

## MINIATURE GLASS PASSIVATED FAST EFFICIENT BRIDGE RECTIFIER

*Reverse Voltage - 50 to 200 Volts    Forward Current - 1.0 Ampere*

### Case Style DFM



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ This series is UL listed under Recognized Component Index, file number E54214
- ◆ Glass passivated chip junctions
- ◆ 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 marked on body

**Mounting Position:** Any

**Weight:** 0.04 ounce, 1.0 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	EDF1AM	EDF1BM	EDF1CM	EDF1DM	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	150	200	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	106	140	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	150	200	Volts
Maximum average forward output rectified current at T <sub>A</sub> =40°C	I <sub>(AV)</sub>	1.0				Amp
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) T <sub>J</sub> =150°C	I <sub>FSM</sub>	50.0				Amps
Rating for fusing (t < 8.3ms)	I <sup>2</sup> t	10.0				A <sup>2</sup> sec
Maximum instantaneous forward voltage drop per leg at 1.0A	V <sub>F</sub>	1.05				Volts
Maximum reverse current at rated DC blocking voltage	I <sub>R</sub>	5.0 1.0				μA mA
Maximum reverse recovery time at (NOTE 1)	t <sub>rr</sub>	50.0				ns
Typical thermal resistance per leg (NOTE 2)	R <sub>θJA</sub> R <sub>θJL</sub>	38.0 12.0				°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150				°C

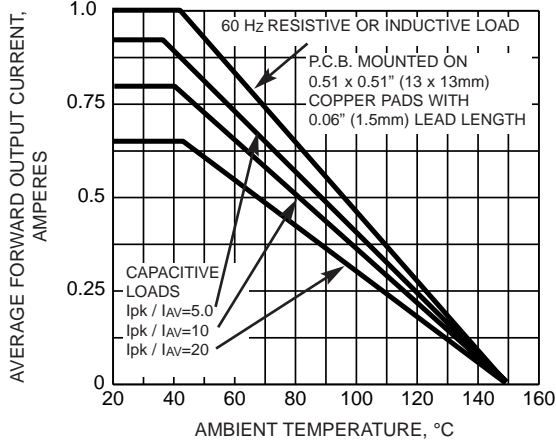
#### NOTES:

(1) Reverse recovery test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A

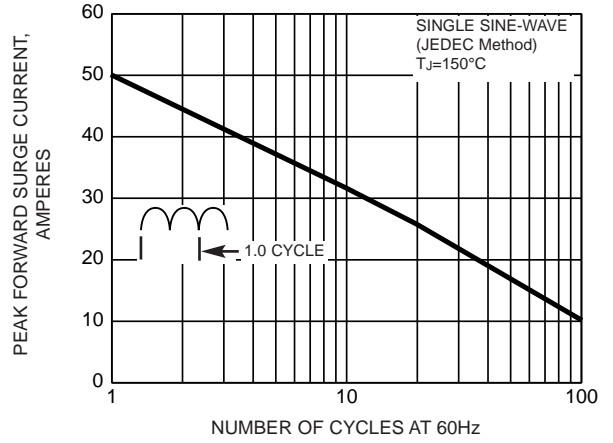
(2) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.51 x 0.51" (13 x 13mm) copper pads

# RATINGS AND CHARACTERISTICS CURVES EDF1AM THRU EDF1DM

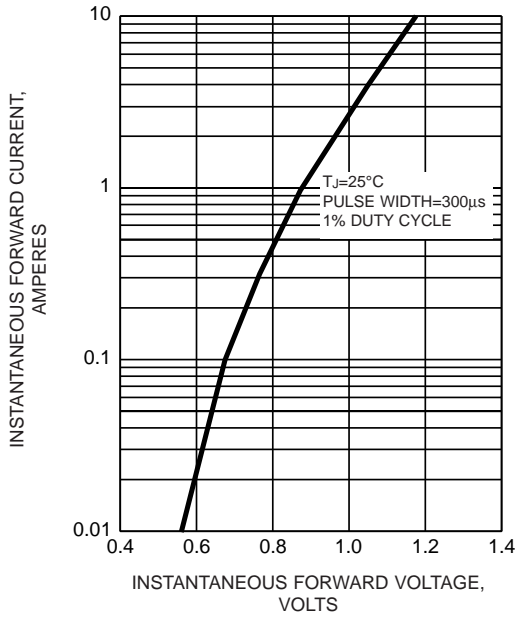
**FIG. 1 - DERATING CURVES OUTPUT RECTIFIED CURRENT**



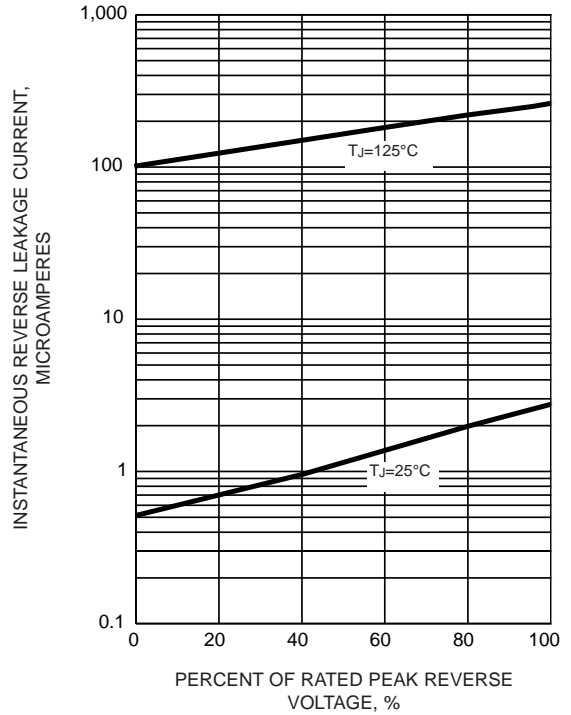
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG**



**FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG**

