

## 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:** 0.014oz., 0.4g

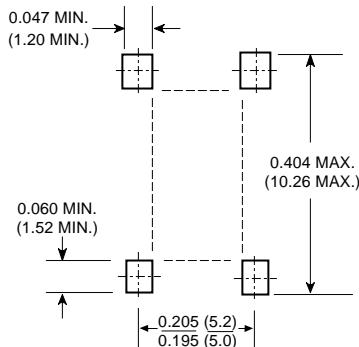
**Packaging codes/options:**

27/1.5K per 13" Reel (16mm Tape)  
 45/50 ea. per Tube-Bulk

## Miniature Glass Passivated Ultrafast Surface Mount Bridge Rectifiers

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

### Mounting Pad Layout



### 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 surge overload rating-50 amperes peak
- 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

## Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

Parameter	Symbol	EDF1AS	EDF1BS	EDF1CS	EDF1DS	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	150	200	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	106	140	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	150	200	V
Maximum average forward output rectified current at TA = 40°C (Note 2)	I <sub>F(AV)</sub>			1.0		A
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) TJ = 150°C	I <sub>FSM</sub>			50		A
Rating for fusing (t < 8.3ms)	I <sup>2</sup> t			10		A <sup>2</sup> sec
Typical thermal resistance per leg (Note 1)	R <sub>θJA</sub> R <sub>θJL</sub>			38 12		°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>			55 to +150		°C

## Electrical Characteristics (TA = 25°C unless otherwise noted)

Parameter	Symbol	EDF1AS	EDF1BS	EDF1CS	EDF1DS	Unit
Max. instantaneous forward voltage drop per leg at 1.0A (Note 2)	V <sub>F</sub>			1.05		V
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TA = 125°C	I <sub>R</sub>			5.0 1.0		µA mA
Max. reverse recovery time at I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1.0A, I <sub>rr</sub> = 0.25A	t <sub>rr</sub>			50		ns

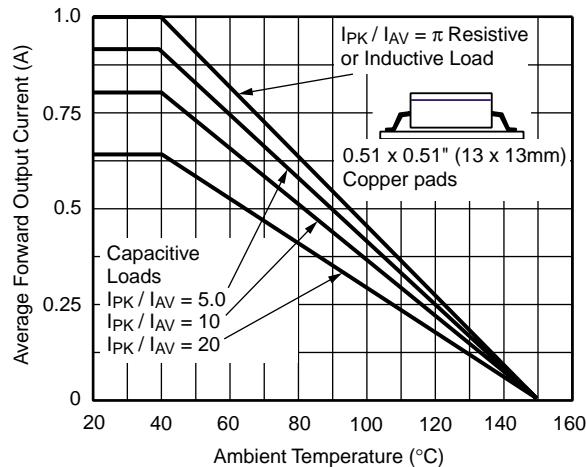
**Notes:** (1) P.C.B. mounted with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas  
 (2) Pulse test: 300µs pulse width, 1% duty cycle

9/5/00

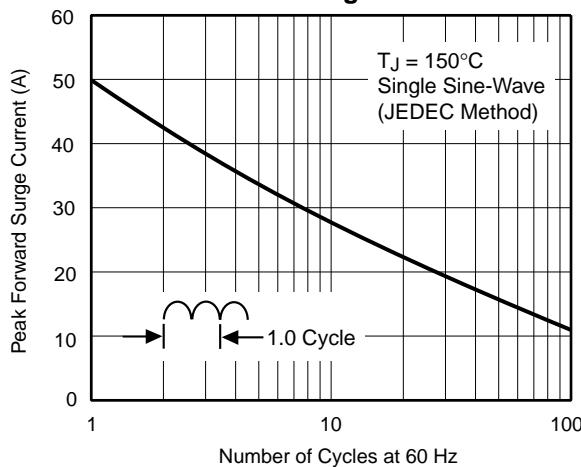
**Ratings and  
Characteristic Curves** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

**Miniature Glass Passivated Ultrafast  
Surface Mount Bridge Rectifiers**

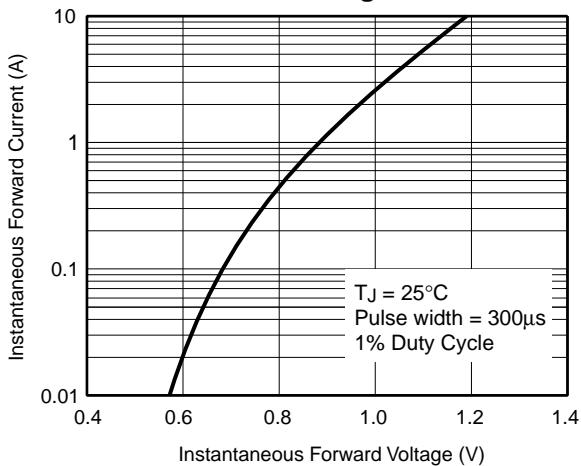
**Fig. 1 - Derating Curves Output  
Rectified Current**



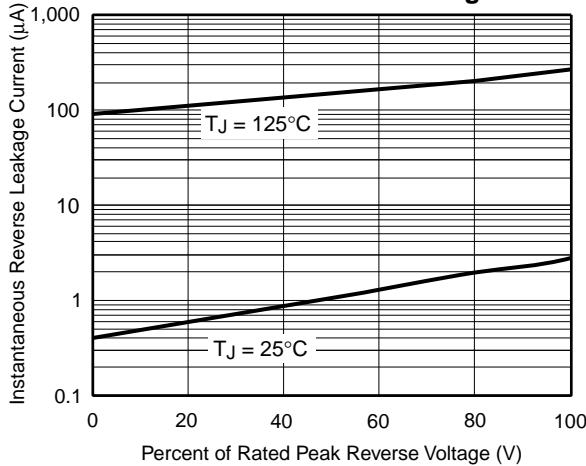
**Fig. 2 - Maximum Non-Repetitive Peak  
Forward Surge Current**



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



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



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

