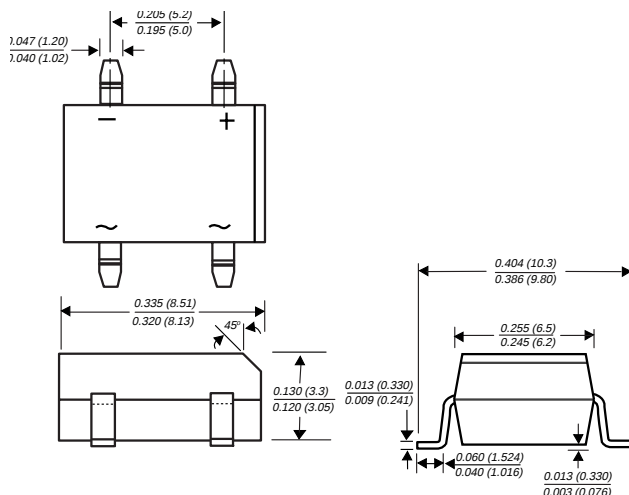


EDF1AS THRU EDF1DS

MINIATURE GLASS PASSIVATED FAST EFFICIENT SURFACE MOUNT BRIDGE RECTIFIER

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

Case Style DFS



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 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



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	EDF1AS	EDF1BS	EDF1CS	EDF1DS	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	35	70	106	140	Volts
Maximum DC blocking voltage	V_{DC}	50	100	150	200	Volts
Maximum average forward output rectified current at $T_A=40^\circ\text{C}$ (NOTE 2)	$I_{(AV)}$	1.0				Amp
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) $T_J=150^\circ\text{C}$	I_{FSM}	50.0				Amps
Rating for fusing ($t < 8.3\text{ms}$)	I^2t	10.0				A^2sec
Maximum instantaneous forward voltage drop per leg at 1.0A	V_F	1.05				Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R	5.0 1.0				μA mA
Maximum reverse recovery time (NOTE 1)	t_{rr}	50.0				ns
Typical thermal resistance per leg (NOTE 2)	$R_{\theta JA}$ $R_{\theta JL}$	38.0 12.0				$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150				$^\circ\text{C}$

NOTES:

(1) Reverse recovery test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$

(2) Units mounted on P.C.B. with 0.51 x 0.51" (13 x 13mm) copper pads

RATINGS AND CHARACTERISTICS CURVES EDF1AS THRU EDF1DS

FIG. 1 - DERATING CURVES OUTPUT RECTIFIED CURRENT

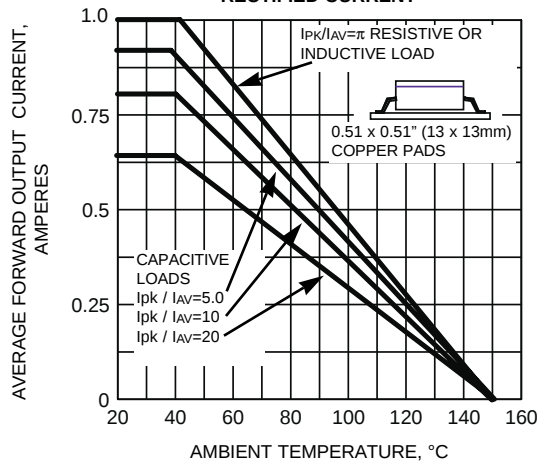


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

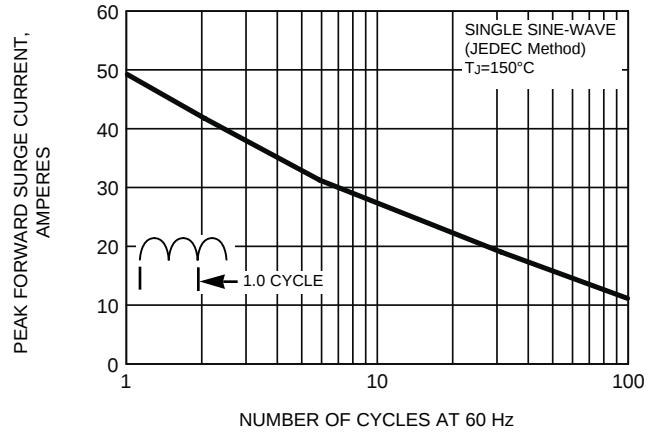


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG

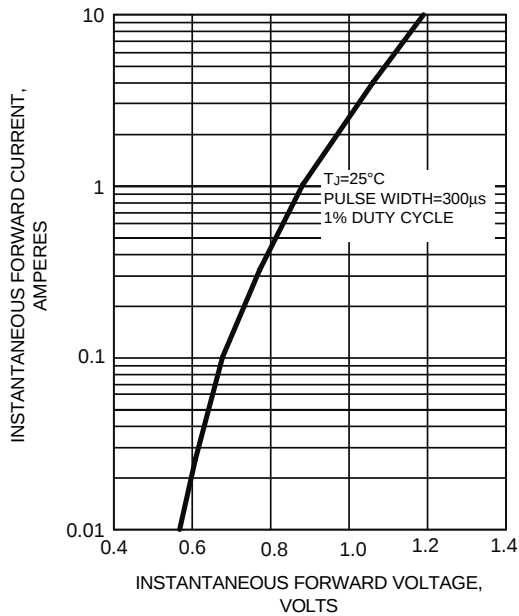


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

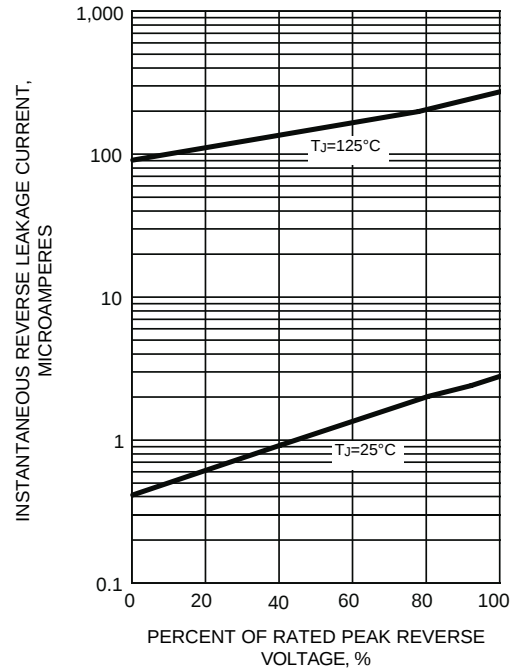


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

