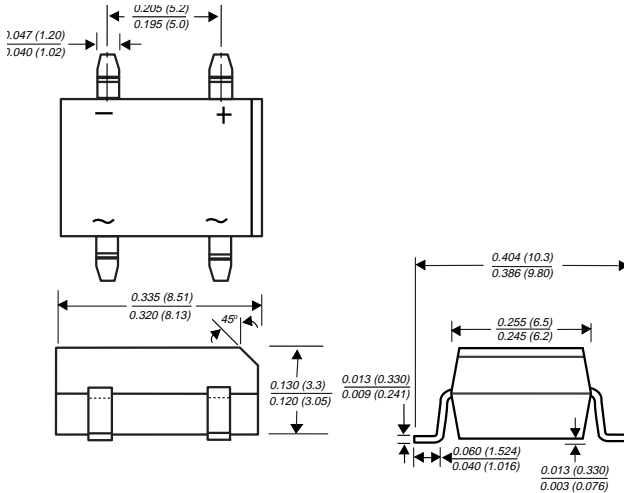


EDF1AS THRU EDF1DS

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 | 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 | | | | $^\circ\text{C}/\text{W}$ |
| 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

