

## FAST RECOVERY BRIDGE

**EDF1A THRU EDF1D**

**VOLTAGE RANGE**

**50 to 200 Volts**

**CURRENT**

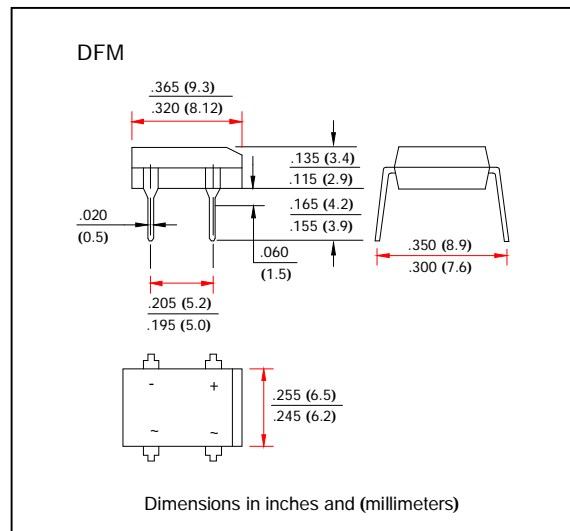
**1.0 Ampere**

### FEATURES

- Glass passivated chip junction
- Superfast recovery time for high efficiency
- Ideal for surface mount applications
- Low leakage
- High forward surge current capability
- High temperature soldering guaranteed:  
260°C/10 seconds at terminals

### MECHANICAL DATA

- Case: Molded plastic body
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Molded on body
- Lead: Plated terminals solderable per MIL-STD-202E method 208C
- Weight: 0.04 ounce, 1.0 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	EDF1A	EDF1B	EDF1C	EDF1D	UNIT
Maximum Reverse Peak Repetitive Voltage	$V_{RRM}$	50	100	150	200	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	105	140	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	150	200	Volts
Maximum Average Forward Rectified Output Current, 0.06" (1.5mm) lead length at $T_A=40^\circ C$ (Note 2)	$I_{(AV)}$	1.0				Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50				Amps
Rating for Fusing ( $t < 8.3ms$ )	$I^2t$	10				$A^2s$
Maximum Instantaneous Forward Voltage drop Per Bridge element at 1.0A	$V_F$	1.05				Volts
Maximum Reverse Current at rated DC blocking voltage per element	$I_R$	$T_A=25^\circ C$	5.0			$\mu Amps$
		$T_A=125^\circ C$	0.5			mAmps
Maximum reverse Recovery Time (Note 1)	$T_{rr}$	50				nS
Typical Junction Capacitance (Note 3)	$C_j$	25				pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40				$^\circ C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150				$^\circ C$

- Notes:**
1. Test condition:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$
  2. Unit mounted on P.C.B. with 0.51" × 0.51" (13×13mm) copper pads.
  3. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.

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### RATINGS AND CHARACTERISTIC CURVES EDF1A THRU EDF1D

FIG. 1- DERATING CURVES OUTPUT RECTIFIED CURRENT

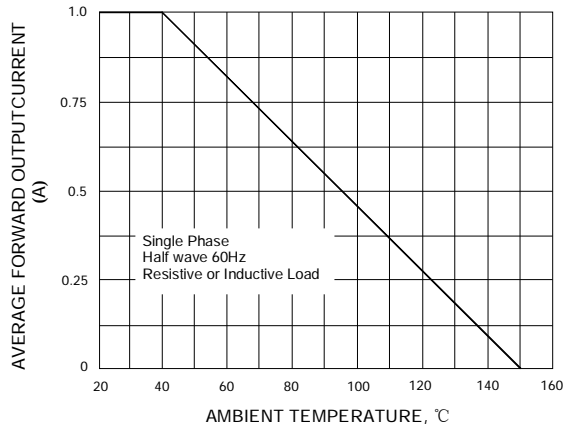


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

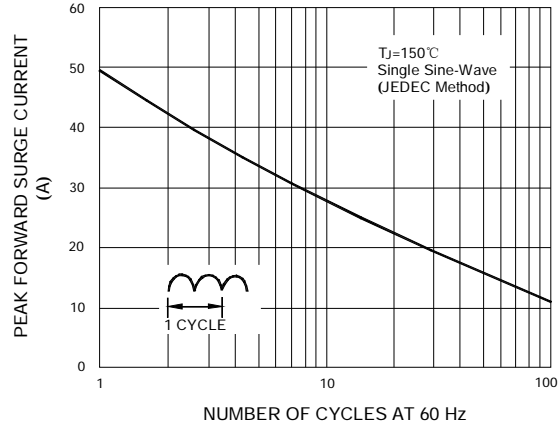


FIG. 3- TYPICAL FORWARD CHARACTERISTICS PER LEG

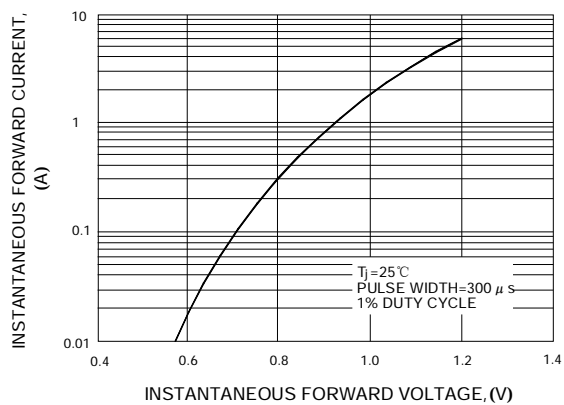


FIG. 4- TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

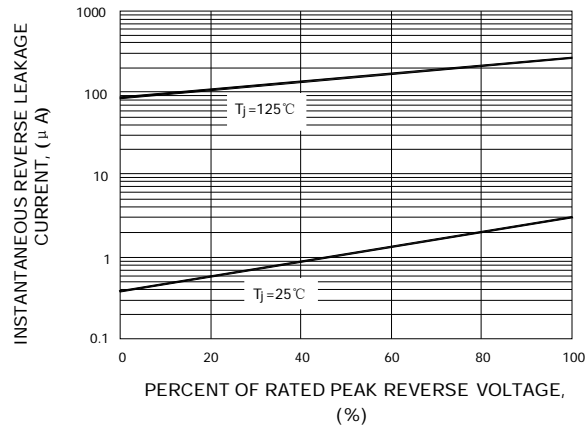


FIG. 5- TYPICAL JUNCTION CAPACITANCE PER LEG

