



FAST RECOVERY BRIDGE

EDF1A THRU EDF1D

VOLTAGE RANGE

50 to 200 Volts

CURRENT

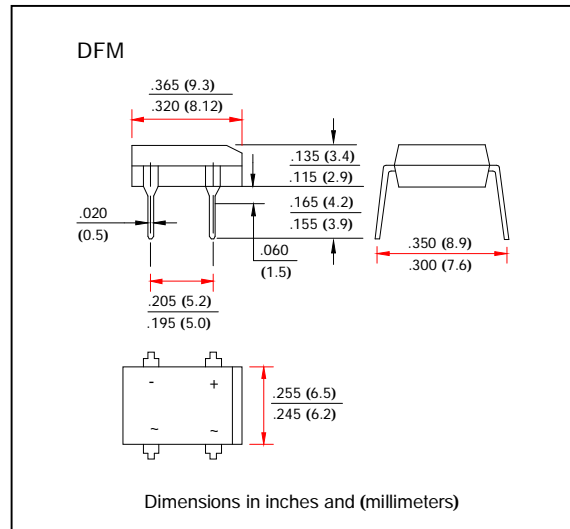
1.0 Ampere

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
- Leadp: 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 $T_A=40^\circ\text{C}$ (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 ($t < 8.3\text{ms}$)	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	$T_A=25^\circ\text{C}$	I_R	5.0			μAmps
	$T_A=125^\circ\text{C}$		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				$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150				$^\circ\text{C}$

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



FAST RECOVERY BRIDGE

EDF1A THRU EDF1D

VOLTAGE RANGE

50 to 200 Volts

CURRENT

1.0 Ampere

RATINGS AND CHARACTERISTIC CURVES EDF1A THRU EDF1D

FIG. 1- DERATING CURVES OUTPUT RECTIFIED CURRENT

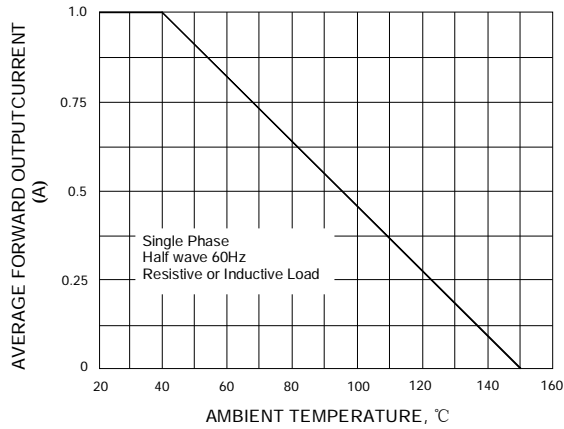


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

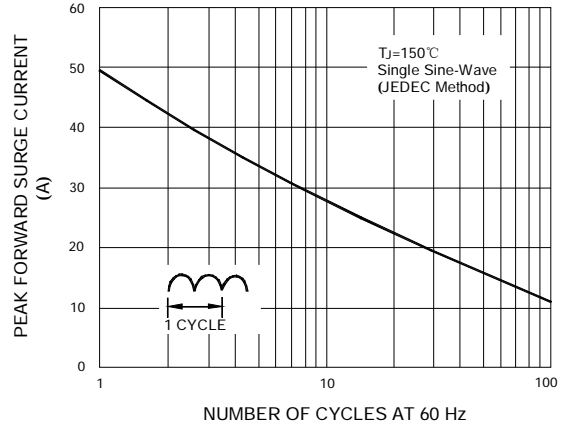


FIG. 3- TYPICAL FORWARD CHARACTERISTICS PER LEG

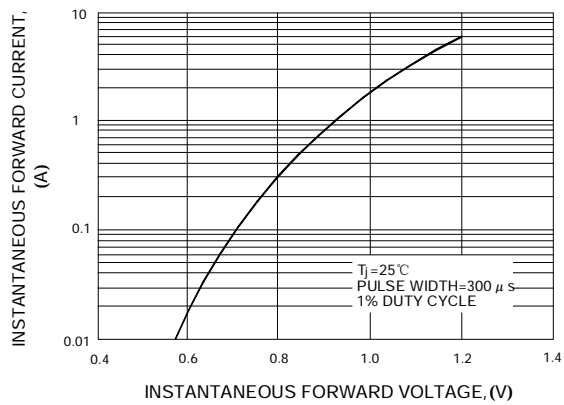


FIG. 4- TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

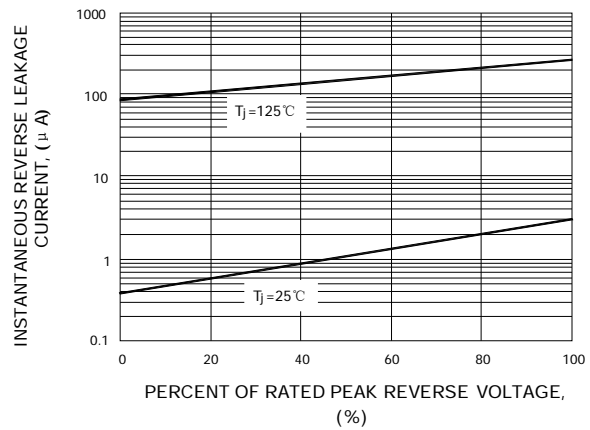


FIG. 5- TYPICAL JUNCTION CAPACITANCE PER LEG

