

EDF1AM - EDF1DM

PRV : 50 - 200 Volts

Io : 1.0 Ampere

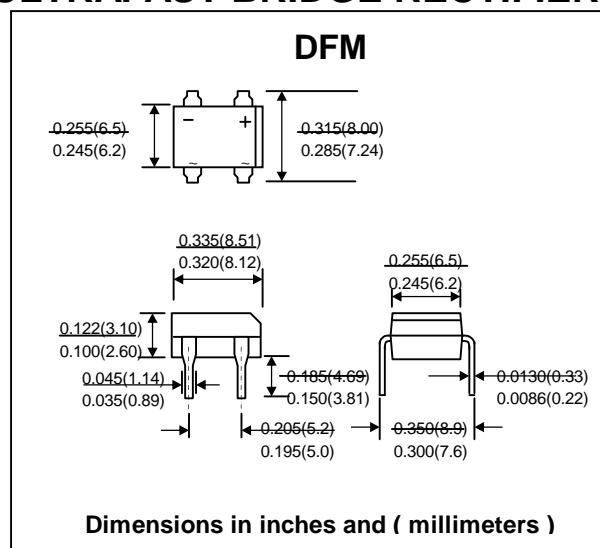
FEATURES :

- * Glass passivated chip junction
- * High forward surge current capability
- * 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
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Terminals : Plated Lead solderable per MIL-STD-750,
Method 2026
- * Polarity : Polarity symbols marked on body
- * Mounting position : Any
- * Weight : 0.42 gram

MINIATURE GLASS PASSIVATED ULTRAFAST BRIDGE RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

RATING	SYMBOL	EDF1AM	EDF1BM	EDF1CM	EDF1DM	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	150	200	V
Maximum RMS Voltage	V _{RMS}	35	70	106	140	V
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	V
Maximum Average Forward Output Rectified Current at Ta = 40°C	I _{F(AV)}	1.0				A
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method) , T _J =150°C	I _{FSM}	50				A
Rating Time at t < 8.3 ms.	I ² t	10				A ² S
Maximum Instantaneous Forward Voltage per leg at I _F = 1.0 A	V _F	1.05				V
Maximum DC Reverse Current Ta = 25°C at Rated DC Blocking Voltage Ta = 125°C	I _R	5.0				μA
	I _{R(H)}	1.0				mA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	50				ns
Typical Thermal Resistance per Leg (Note 2)	R _{θJA}	40				°C/W
	R _{θJL}	12				°C/W
Junction and Storage Temperature Range	T _J , T _{STG}	- 55 to + 150				°C

Notes :

(1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A.

(2) Thermal Resistance from Junction to Ambient on P.C Board with 0.5" x 0.5" (13mm x 13mm) Copper Pads.

RATING AND CHARACTERISTIC CURVES (EDF1AM - EDF1DM)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

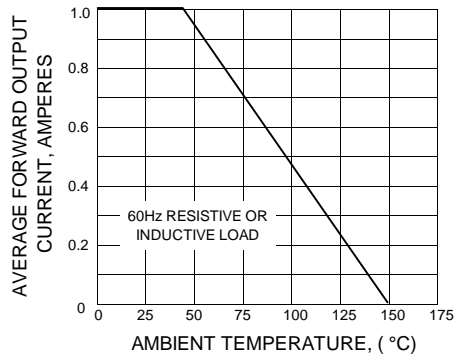


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

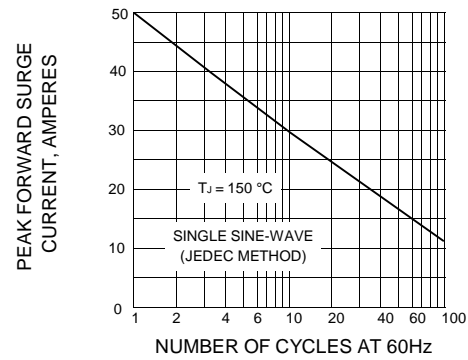


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

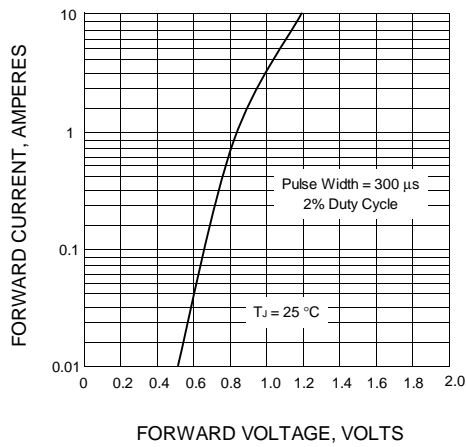


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

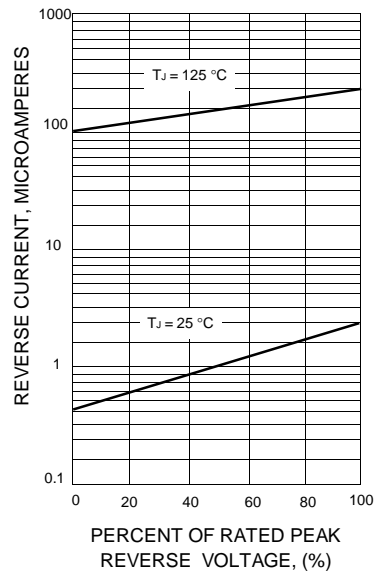


FIG.3 - TYPICAL JUNCTION CAPACITANCE PER LEG

