Certificate Number: Q10561

Certificate Number: E17276

EDF1AM - EDF1DM

MINIATURE GLASS PASSIVATED ULTRAFAST BRIDGE RECTIFIERS

PRV : 50 - 200 Volts
Io : 1.0 Ampere

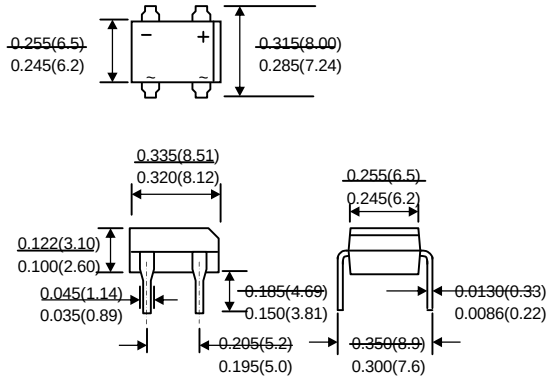
FEATURES :

* 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

DFM



Dimensions in inches and (millimeters)

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) , Tj=150°C	I_{FSM}	50				A
Rating Time at t < 8.3 ms.	I^2t	10				A^2S
Maximum Instantaneous Forward Voltage per leg at I_F = 1.0 A	V_F	1.05				V
Maximum DC Reverse Current Ta = 25°C	I_R	5.0				µA
at Rated DC Blocking Voltage Ta = 125°C	$I_{R(H)}$	1.0				mA
Maximum Reverse Recovery Time (Note 1)	Trr	50				ns
Typical Thermal Resistance per Leg (Note 2)	RθJA	40				°C/W
	RθJL	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, Irr = 0.25 A.

(2) Thermal Resistance from Junction to Ambient on P.C Broad 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

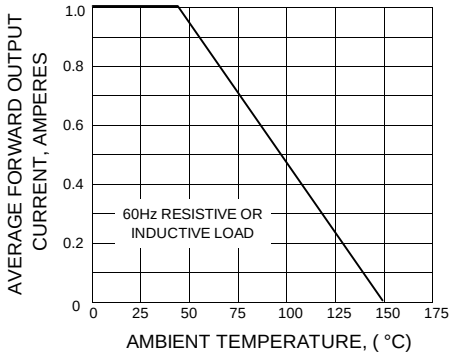


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

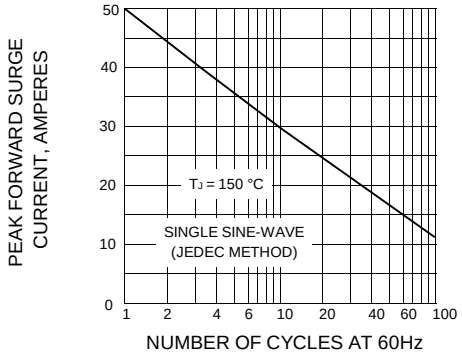


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

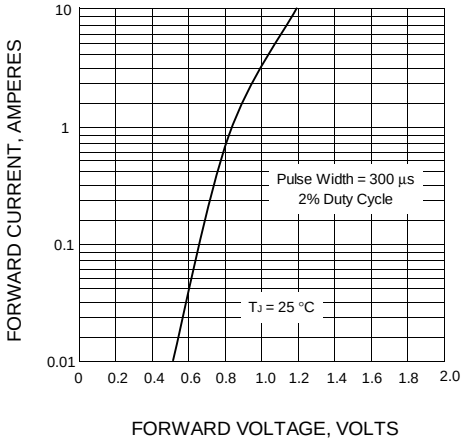


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

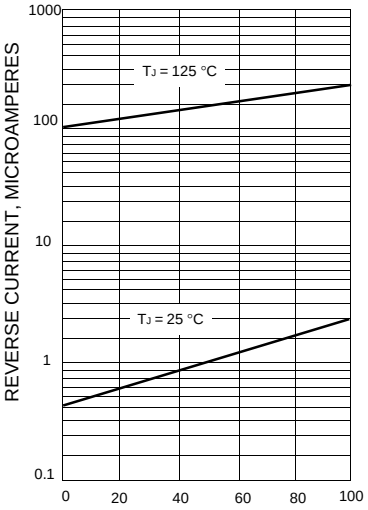


FIG.3 - TYPICAL JUNCTION CAPACITANCE PER LEG

