

EDF1AS - EDF1DS MINIATURE GLASS PASSIVATED ULTRAFAST BRIDGE RECTIFIERS

PRV : 50 - 200 Volts

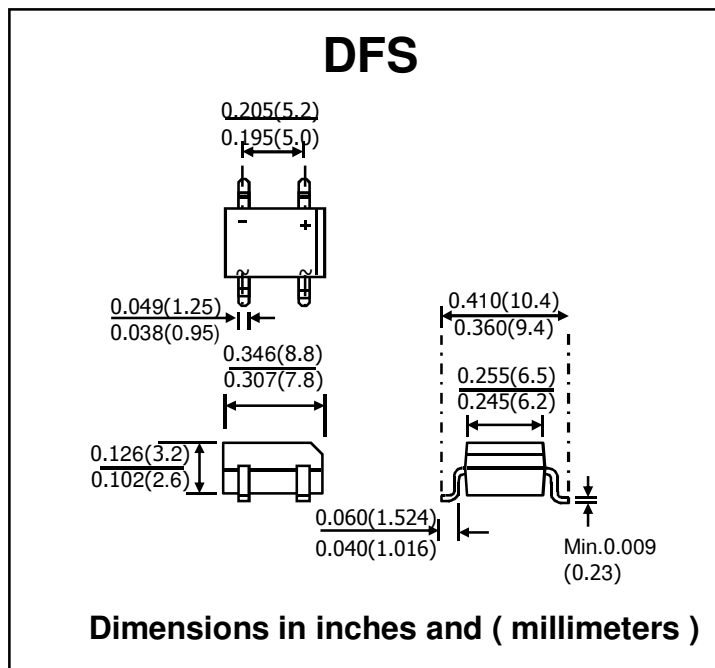
Io : 1.0 Ampere

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-0 rate flame retardant
- * Terminals : Leads solderable per MIL-STD-202,
method 208 guaranteed
- * Mounting position : Any
- * Weight : 0.02 ounce, 0.4 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

RATING	SYMBOL	EDF1AS	EDF1BS	EDF1CS	EDF1DS	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	$I_{F(AV)}$	1.0				A
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method) , $T_j=150^{\circ}\text{C}$	I_{FSM}	50				A
Rating Time at $t < 8.3$ ms.	I^2t	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 $T_a = 25^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_a = 125^{\circ}\text{C}$	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)	$R_{\theta JA}$	40				$^{\circ}\text{C/W}$
	$R_{\theta JL}$	12				$^{\circ}\text{C/W}$
Junction and Storage Temperature Range	T_J, T_{STG}	- 55 to + 150				$^{\circ}\text{C}$

Notes :

- (1) Reverse Recovery Test Conditions : $I_F = 0.5$ 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 (EDF1AS - EDF1DS)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

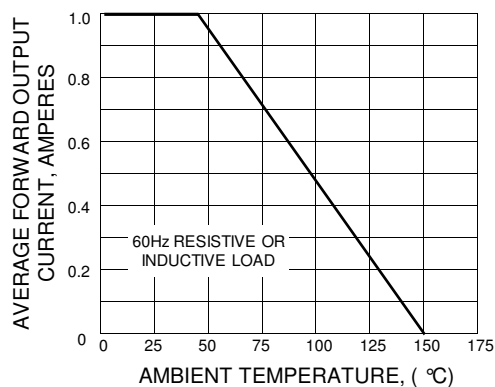


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

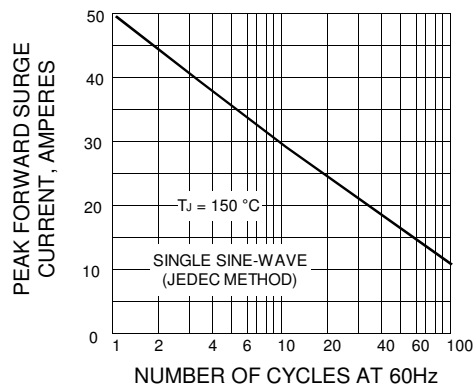


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

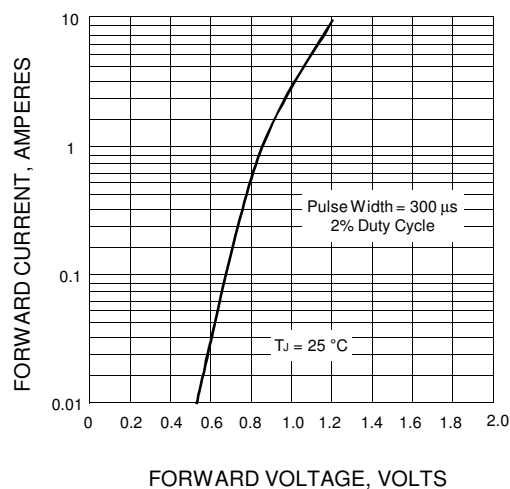


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

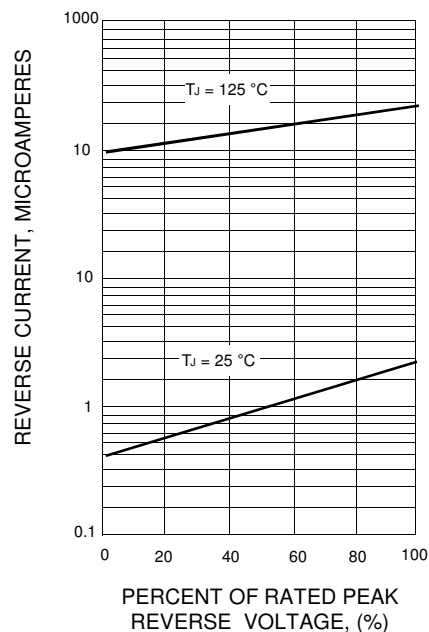


FIG.3 - TYPICAL JUNCTION CAPACITANCE PER LEG

