

DF15005M - DF1510M

PRV : 50 - 1000 Volts
Io : 1.5 Ampere

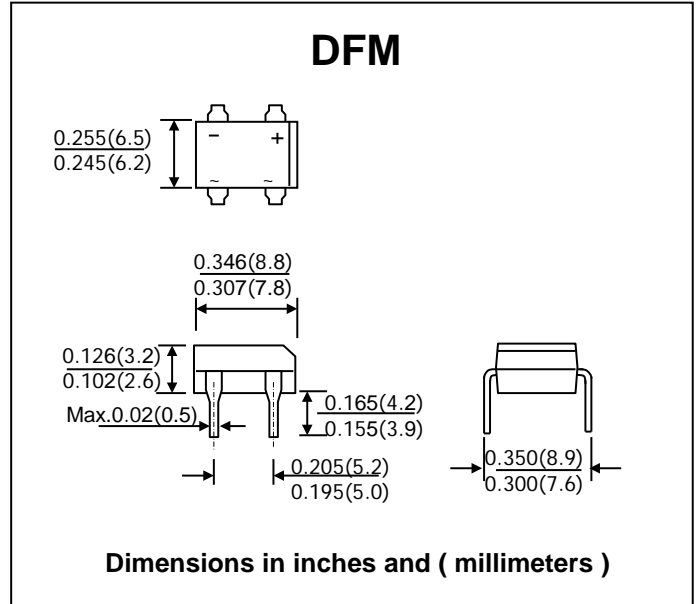
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Ideal for printed circuit board
- * **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

MINI-BRIDGE RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. 60 Hz, resistive or inductive load.

RATING	SYMBOL	DF	DF	DF	DF	DF	DF	DF	UNIT
		15005M	1501M	1502M	1504M	1506M	1508M	1510M	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Rectified Current at $T_a = 40^\circ C$	$I_{F(AV)}$	1.5							A
Maximum Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Current Squared Time at $t < 8.3$ ms.	I^2t	10							A ² S
Maximum Instantaneous Forward Voltage per element at $I_F = 1.5$ A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5.0							μA
	$I_{R(H)}$	500							μA
Typical Junction Capacitance per element (Note 1)	C_j	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^\circ C/W$
Junction and Storage Temperature Range	T_J, T_{STG}	- 55 to + 150							$^\circ C$

Notes : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0VDC

(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 (DF15005M - DF1510M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

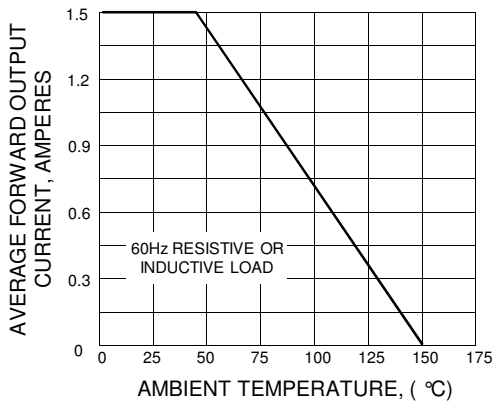


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

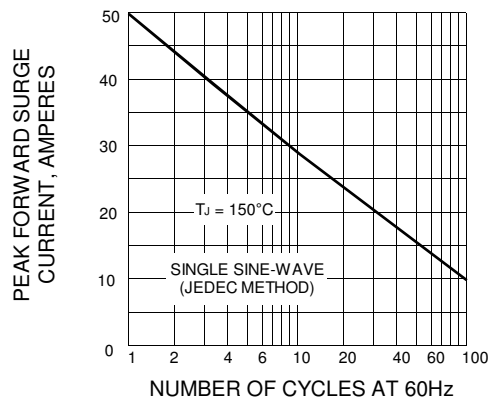


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

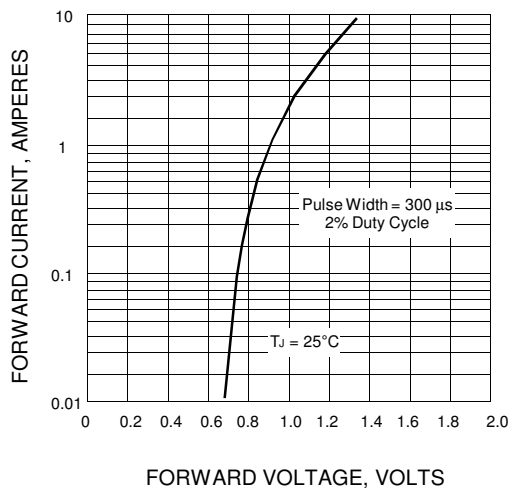


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

