

DF15005S - DF1510S

PRV : 50 - 1000 Volts

Io : 1.5 Ampere

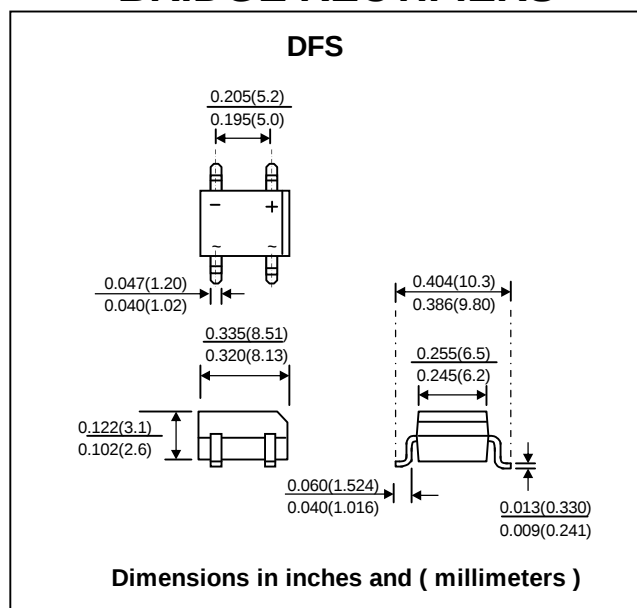
FEATURES :

- * 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-O rate flame retardant
- * Terminals : Plated Lead solderable per MIL-STD-750, Method 2026
- * Polarity : Polarity symbols marked on body
- * Mounting position : Any
- * Weight : 0.4 gram

SURFACE MOUNT 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 15005S	DF 1501S	DF 1502S	DF 1504S	DF 1506S	DF 1508S	DF 1510S	UNIT
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 Ta = 40°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 ² t	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 Ta = 25°C	I _R	5.0							μA
at Rated DC Blocking Voltage Ta = 125°C	I _{R(H)}	500							μA
Typical Junction Capacitance per element (Note 1)	C _j	25							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	40							°C/W
Junction and Storage Temperature Range	T _J , T _{STG}	- 55 to + 150							°C

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

(2) Units mounted on P.C.B. with 0.51 x 0.51" (13 x 13mm) copper pads

RATING AND CHARACTERISTIC CURVES (DF15005S - DF1510S)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

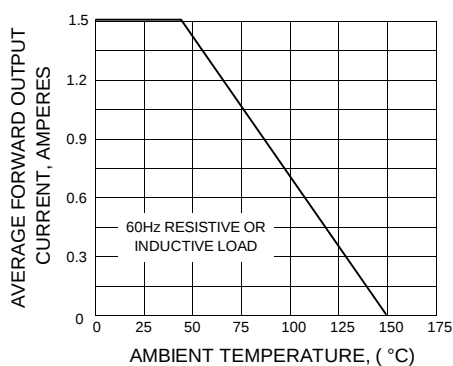


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

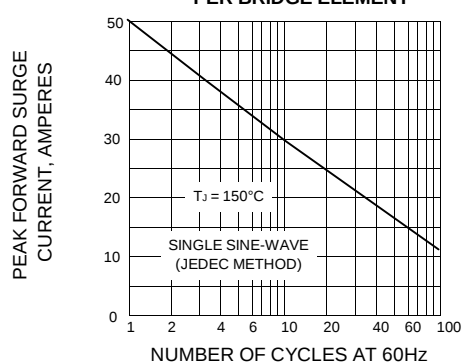


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

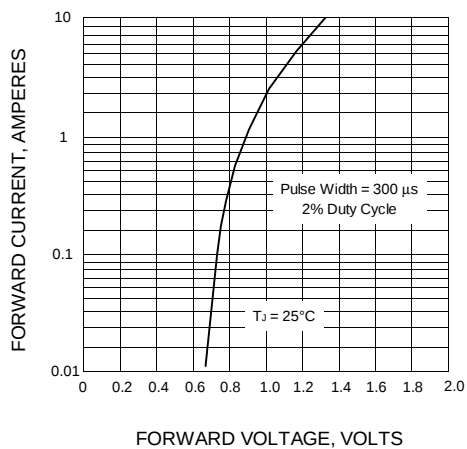


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

