

DF15005S - DF1510S

SURFACE MOUNT MINI BRIDGE RECTIFIERS

PRV : 50 - 1000 Volts

Io : 1.5 Ampere

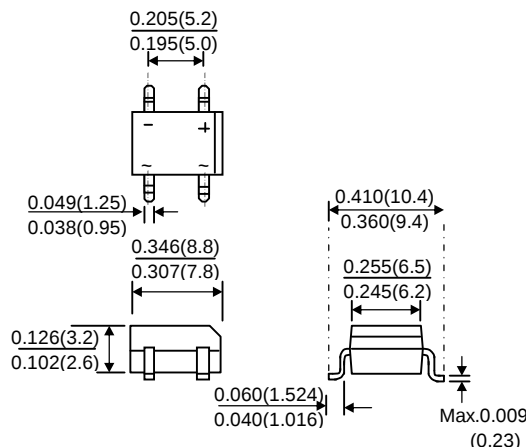
FEATURES :

- * Glass passivated junction chip
- * 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

DFS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

RATING	SYMBOL	DF 15005	DF 1501S	DF 1502S	DF 1504S	DF 1506S	DF 1508S	DF 1510S	UNI T
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Rectified Current at Ta = 40°C	IF(AV)	1.5							A
Maximum Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	50							A
Current Squared Time at t < 8.3 ms.	I ² t	10							A ² S
Maximum Instantaneous Forward Voltage per element at IF = 1.5 A	VF	1.1							V
Maximum DC Reverse Current Ta = 25°C at Rated DC Blocking Voltage Ta = 125°C	IR	5.0							μA
	IR(H)	500							μA
Typical Junction Capacitance per element (Note 1)	Cj	25							pF
Typical Thermal Resistance (Note 2)	RθJA	40							°C/W
Junction and Storage Temperature Range	TJ, TSTG	- 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

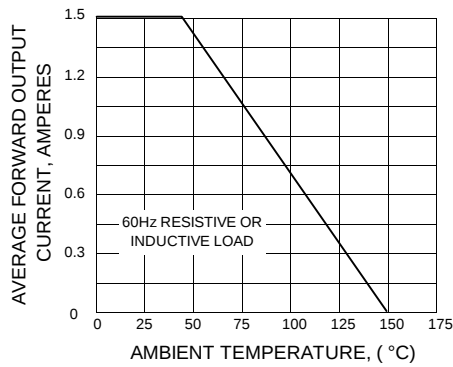


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

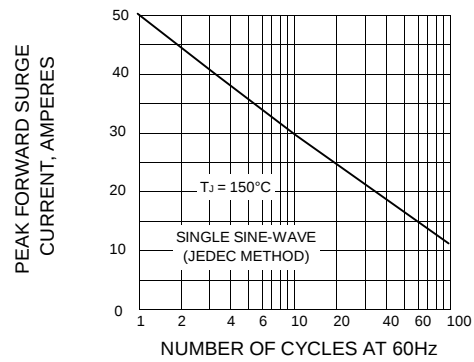


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

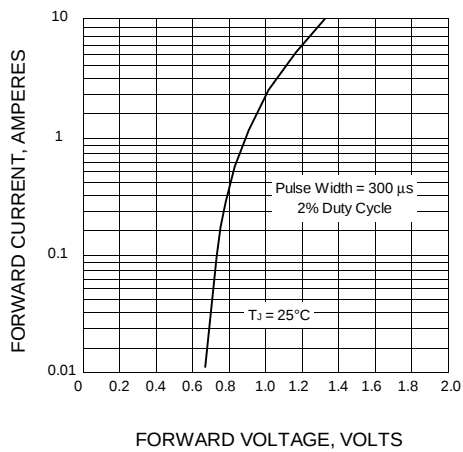


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

