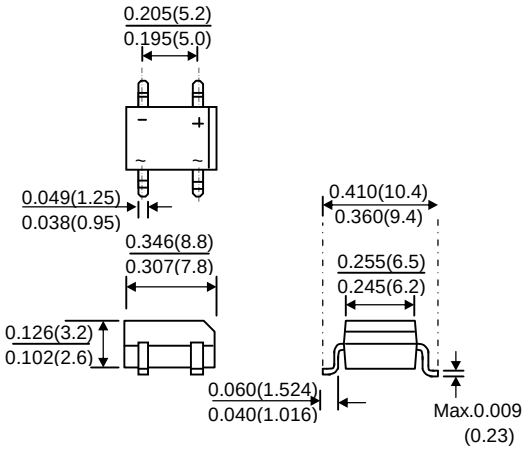
Brückewell

DF15005S - DF1510S

SURFACE MOUNT MINI BRIDGE RECTIFIERS

PRV : 50 - 1000 Volts
Io : 1.5 Ampere

DFS



Dimensions in inches and (millimeters)

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

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	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^2t	10							A^2S
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)	Cj	25							pF
Typical Thermal Resistance (Note 2)	RθJA	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

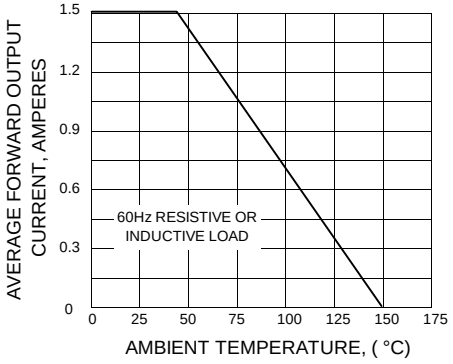


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

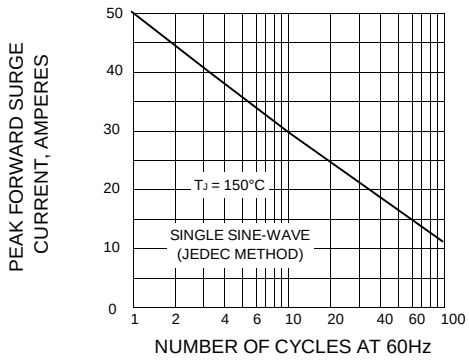


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

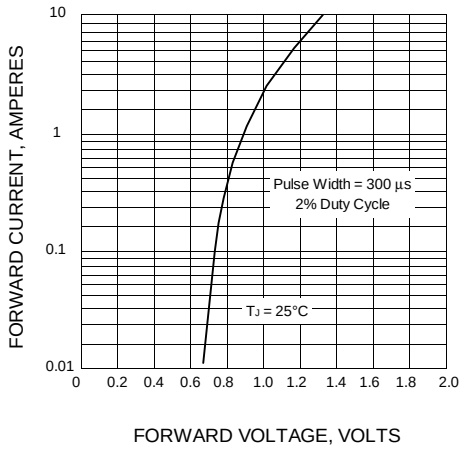


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT