

**SURFACE MOUNT
GLASS PASSIVATED BRIDGE RECTIFIERS**

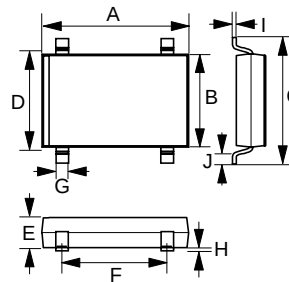
REVERSE VOLTAGE - **50 to 1000** Volts
FORWARD CURRENT - **1.5** Amperes

FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability.
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead Pb/Sn copper
- The plastic material has UL flammability classification 94V-0
- UL recognized file # E95060

MECHANICAL DATA

- Polarity : As marked on Body
- Weight : 0.02 ounces, 0.38 grams
- Mounting position : Any

DF-S


DF-S		
DIM.	MIN.	MAX.
A	8.20	8.50
B	6.20	6.50
C	-	10.30
D	7.40	7.90
E	2.40	2.60
F	5.00	5.20
G	1.14	-
H	.076	.330
I	0.22	0.30
J	1.02	1.53

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	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 Rectified Current @ $T_A=40^{\circ}C$	$I_{(AV)}$	1.5							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I_{FSM}	50							A
Maximum forward Voltage at 1.5A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_J=25^{\circ}C$ @ $T_J=125^{\circ}C$	I_R	10 500							μA
I^2t Rating for fusing ($t < 8.3ms$)	I^2t	10.4							A^2S
Typical Junction Capacitance per element (Note1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^{\circ}C/W$
Operating Temperature Range	T_J	-55 to +150							$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to +150							$^{\circ}C$

NOTES : 1. Measured at 1.0MHz and applied reverse voltage of 4.0VDC.
2. Thermal resistance from junction to ambient mounted on P.C.B with 0.5x0.5"(13x13mm) copper pads.

REV. 1, 24-May-2000

FIG.1 - FORWARD CURRENT DERATING CURVE

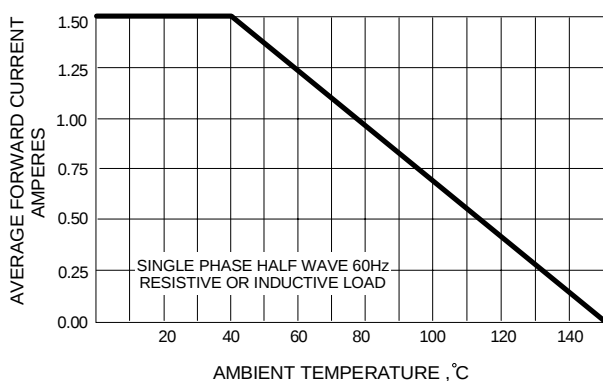


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

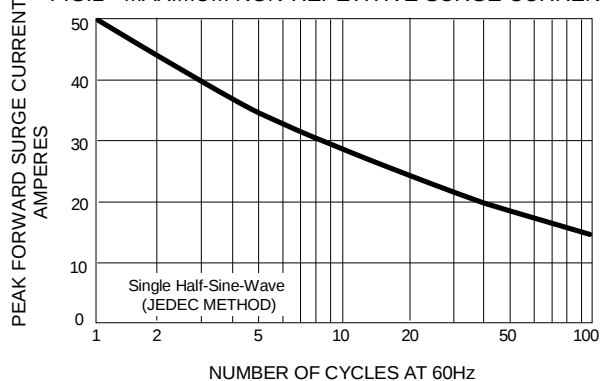


FIG.3 - TYPICAL JUNCTION CAPACITANCE

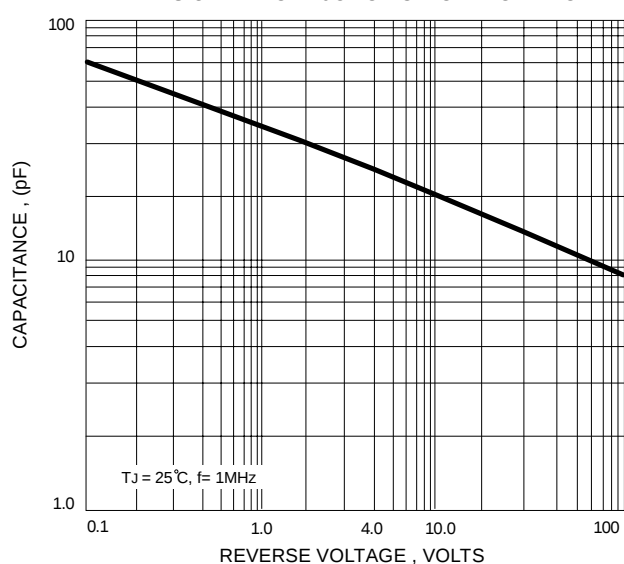


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

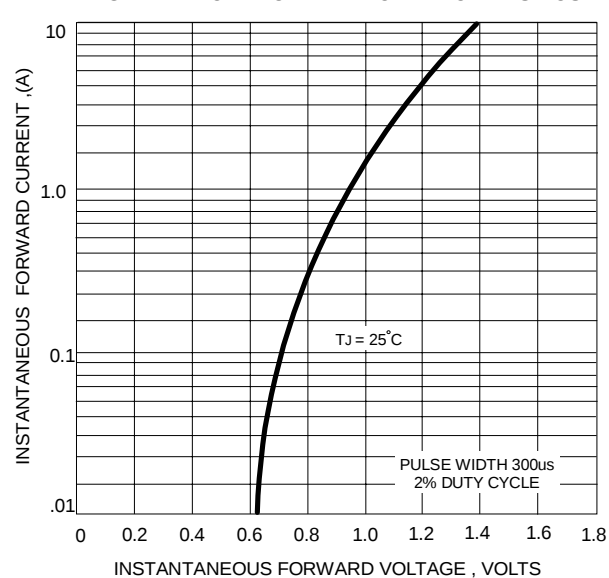


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

