LITE-ON SEMICONDUCTOR

DF005M thru DF10M

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE **- 50** to **1000** Volts
FORWARD CURRENT **- 1.0** Amperes

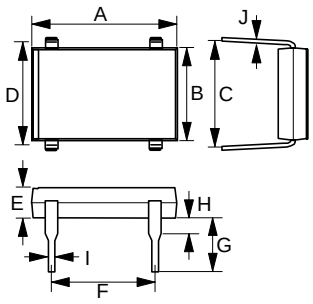
FEATURES

- 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



DF		
DIM.	MIN.	MAX.
A	8.20	8.50
B	6.20	6.50
C	7.60	8.90
D	7.40	7.60
E	2.40	2.60
F	5.00	5.20
G	4.10	4.60
H	1.50	1.70
I	0.41	0.51
J	0.22	0.30
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

CHARACTERISTICS	SYMBOL	DF005M	DF01M	DF02M	DF04M	DF06M	DF08M	DF10M	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˚C	$I_{(AV)}$	1.0							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 1.0A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T_J=25˚C @T_J=125˚C	I_R	10 500							uA
I^2t Rating for fusing (t < 8.3ms)	I^2t	10.4							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							˚C/W
Operating Temperature Range	T_J	-55 to +150							˚C
Storage Temperature Range	T_{STG}	-55 to +150							˚C

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

REV. 2, 01-Dec-2000, KBDC01

RATING AND CHARACTERISTIC CURVES
DF005M thru DF10M

FIG.1 - FORWARD CURRENT DERATING CURVE

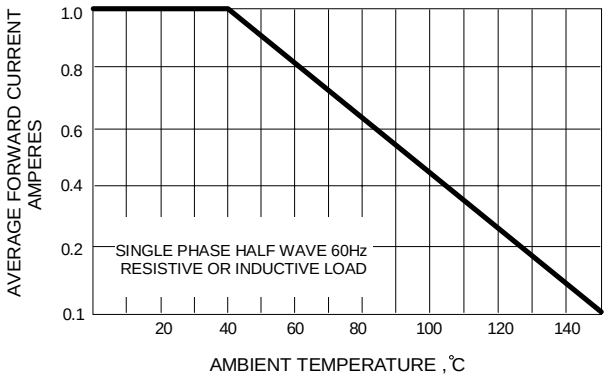


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

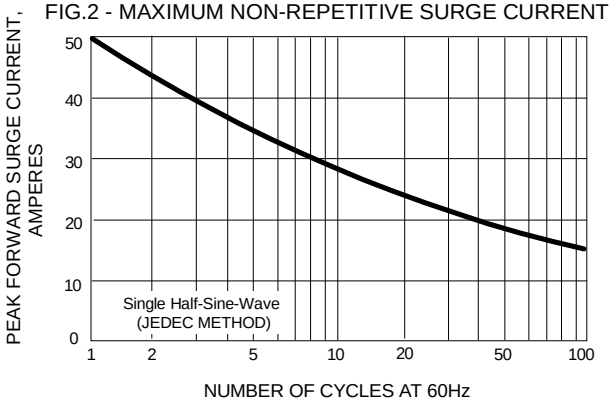


FIG.3 - TYPICAL JUNCTION CAPACITANCE

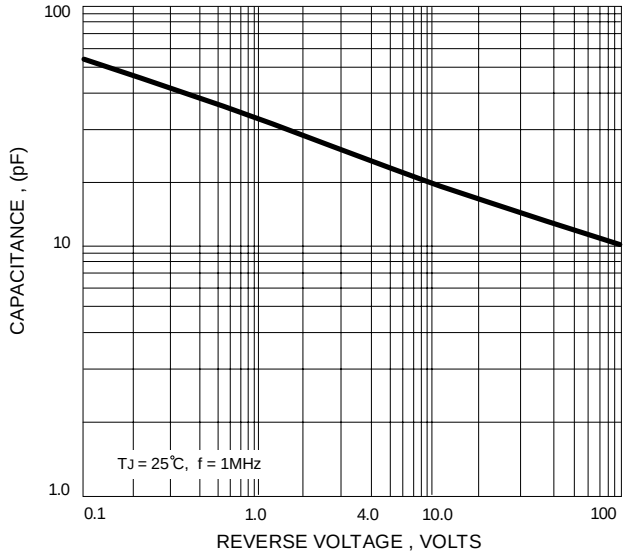


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

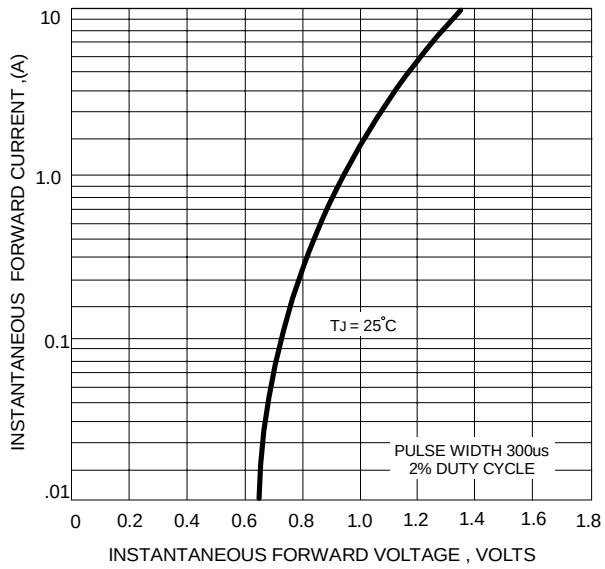


FIG.5 - TYPICAL REVERSE CHARACTERISTICS