

SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS

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

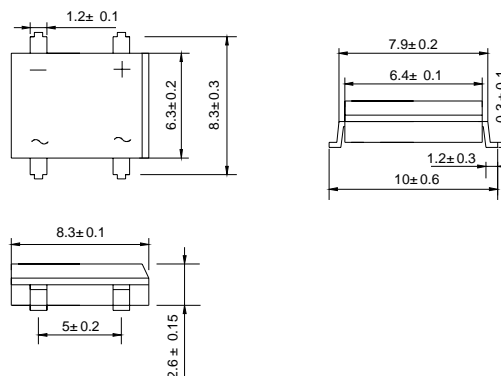
FEATURES

- 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
- The plastic material has UL flammability classification 94V-0
- UL recognized file

MECHANICAL DATA

- Polarity :As marked on Body
- Weight : 0.016 ounces,0.45 grams
- Mounting position : Any

DF-S



Dimensions in millimeters

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	DF005S	DF01S	DF02S	DF04S	DF06S	DF08S	DF10S	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 @ $T_A=40^\circ\text{C}$	$I_F(AV)$	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 @ $T_J=25^\circ\text{C}$ @ $T_J=125^\circ\text{C}$	I_R	10 500							μA
$I^2 t$ Rating for fusing ($t < 8.3\text{ms}$)	$I^2 t$	10.4							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

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.

FIG.1 - FORWARD CURRENT DERATING CURVE

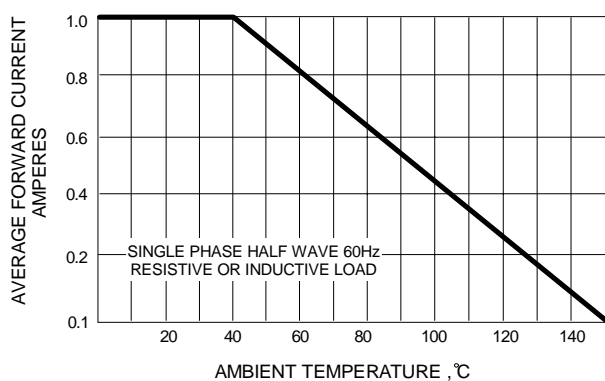


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

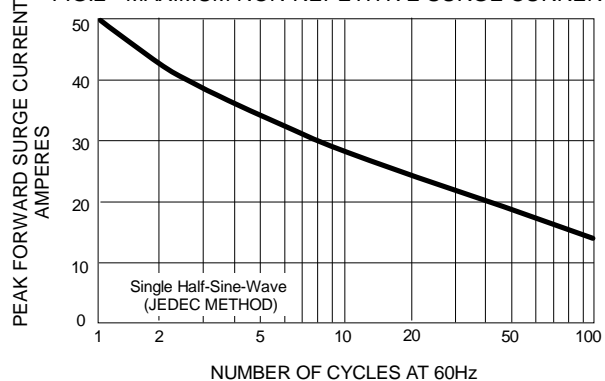


FIG.3 - TYPICAL JUNCTION CAPACITANCE

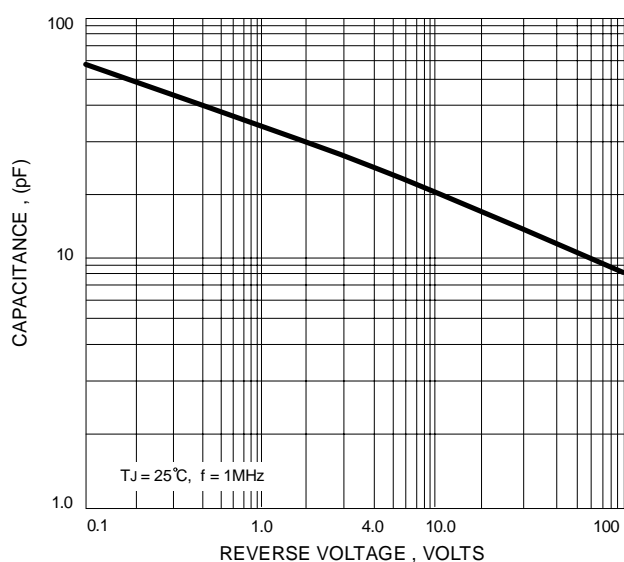


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

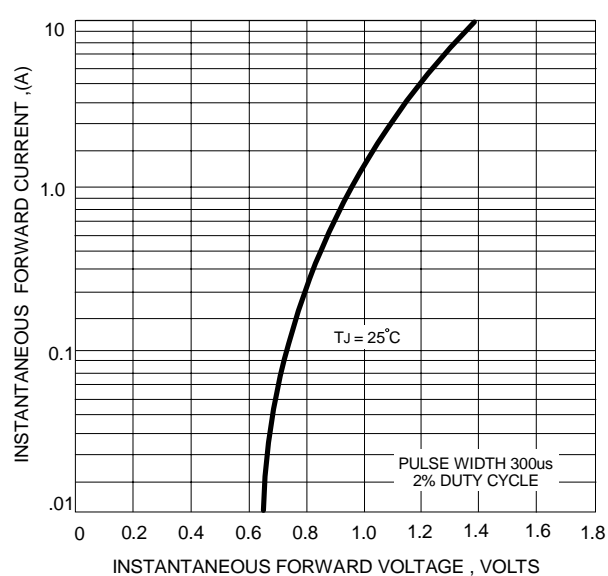


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

