

**SURFACE MOUNT  
GLASS PASSIVATED BRIDGE RECTIFIERS**

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

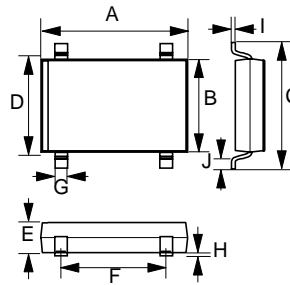
**FEATURES**

- 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 # 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	1.00	-
H	.076	.330
I	0.22	0.30
J	1.02	1.53

All Dimensions in millimeter

Datasheet Directory

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

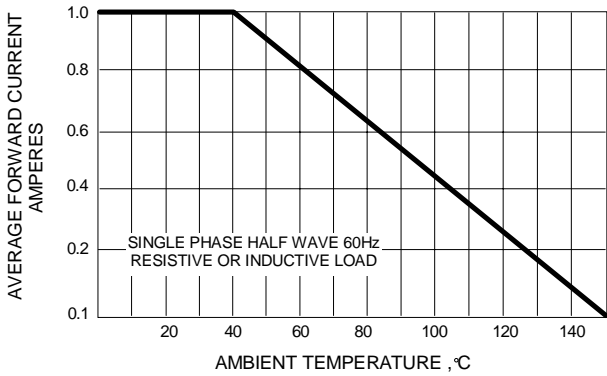
Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	DF005S	DF01S	DF02S	DF04S	DF06S	DF08S	DF10S	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>A</sub> =40°C	I <sub>(AV)</sub>	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I <sub>FSM</sub>	50							A
Maximum forward Voltage at 1.0A DC	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =125°C	I <sub>R</sub>	10 500							uA
I <sup>2</sup> t Rating for fusing (t < 8.3ms)	I <sup>2</sup> t	10.4							A <sup>2</sup> S
Typical Junction Capacitance per element (Note 1)	C <sub>J</sub>	25							pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	40							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

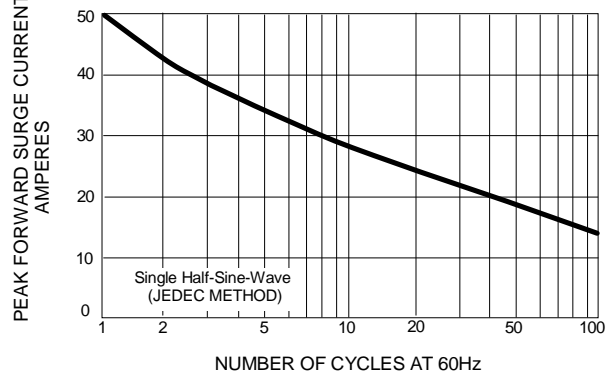
NOTES : 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2. Thermal resistance from junction to ambient mounted on P.C.B with 0.5x0.5"(13x13mm) copper pads.

REV. 4, Apr-2005, KBDA01

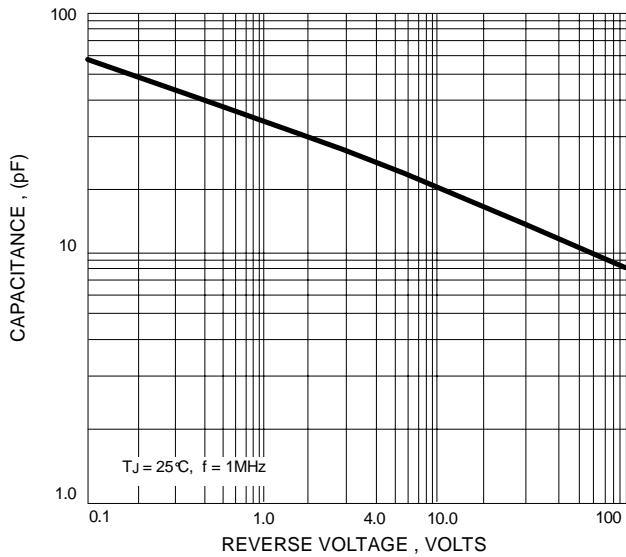
**FIG.1 - FORWARD CURRENT DERATING CURVE**



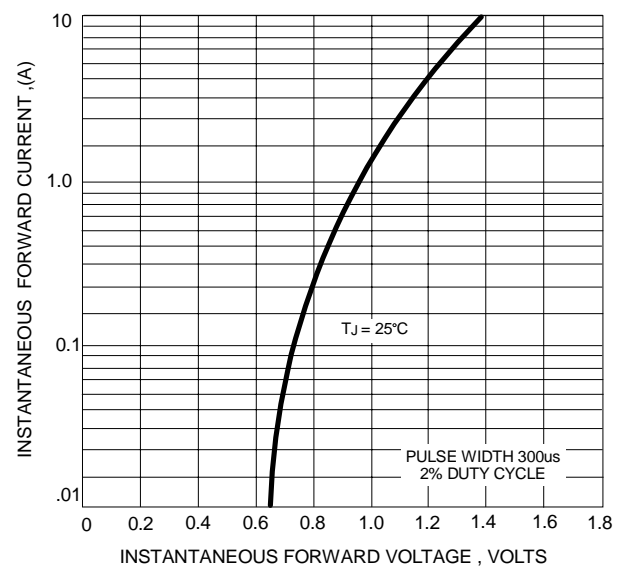
**FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT**



**FIG.3 - TYPICAL JUNCTION CAPACITANCE**



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

