

DF005S-DF10S

Surface Mount Glass Passivated Bridge Rectifiers

REVERSE VOLTAGE - **50 to 1000** Volts

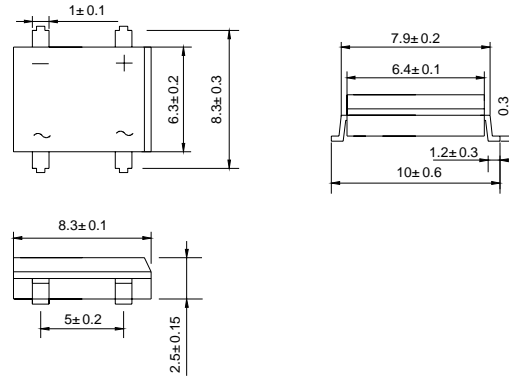
FORWARD CURRENT - **1.0** Amperes



DBS

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



Mechanical Data

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

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°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 @T _J =25°C at Rated DC Blocking Voltage @T _J =125°C	I _R	10 500							μ A
I ² t Rating for fusing (t < 8.3ms)	I ² t	10.4							A ² S
Typical Junction Capacitance per element (Note 1)	C _J	25							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	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.

Ratings AND Characteristic Curves

FIG.1 - FORWARD CURRENT DERATING CURVE

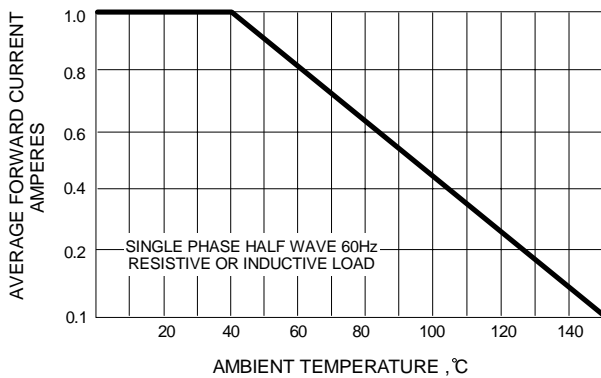


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

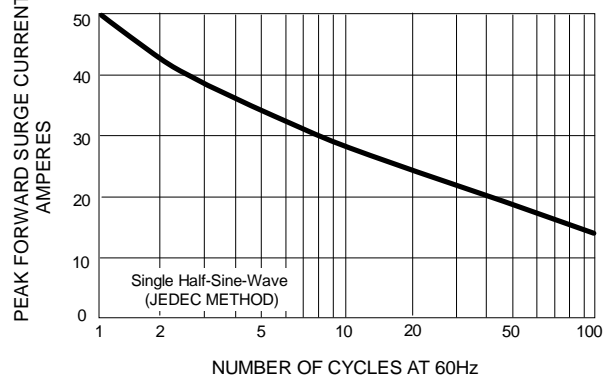


FIG.3 - TYPICAL JUNCTION CAPACITANCE

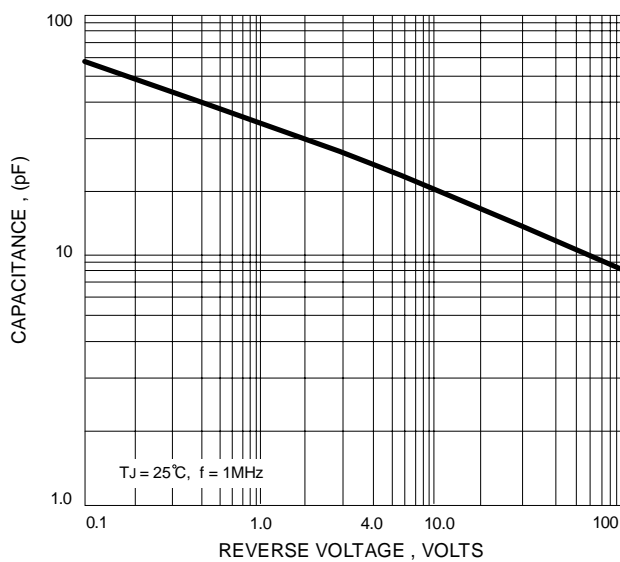


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

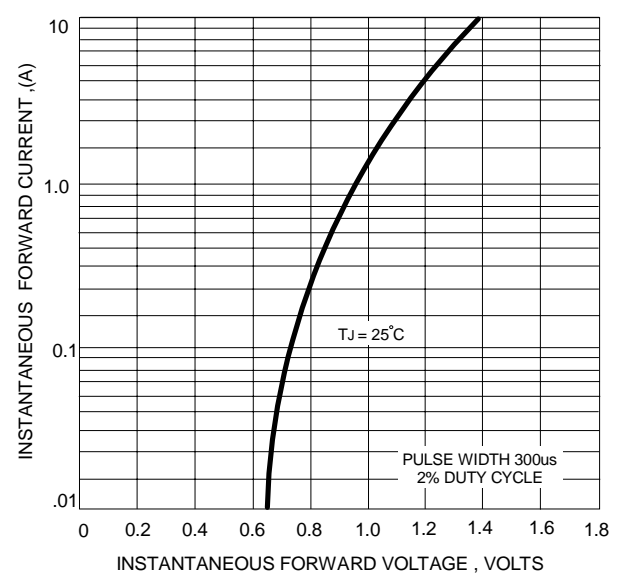


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

