

FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- High surge overload rating of 50 Amperes peak
- Ideal for printed circuit board
- Glass passivated chip junction

MECHANICAL DATA

Case: Molded plastic, DB-S

Epoxy: UL 94V-0 rate flame retardant

Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed

Mounting position: Any

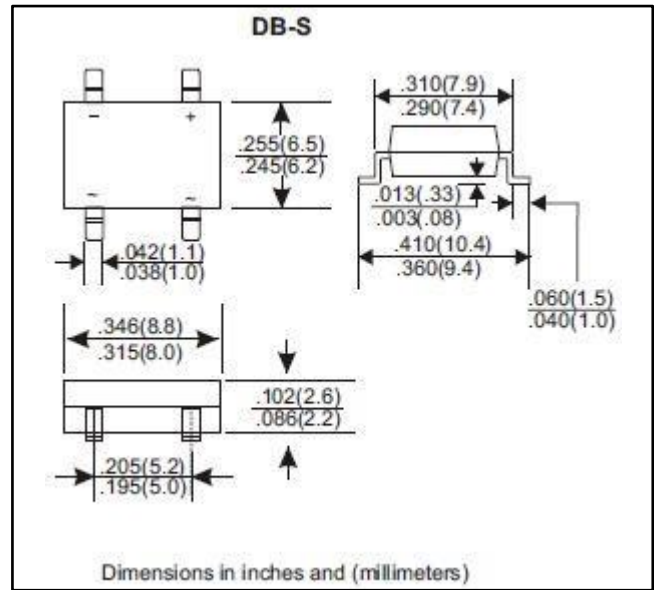
Weight: 0.02ounce, 0.4gram

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%.



	Symbols	DF005S	DF01S	DF02S	DF04S	DF06S	DF08S	DF10S	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
(Note 2)	$I_{(AV)}$				1.0				Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}				30				Amp
Maximum Forward Voltage at 1.0A DC and 25°C	V_F				1.1				Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$	I_R				5.0				uAmp
at Rated DC Blocking Voltage $T_A=125^\circ\text{C}$					500				
Typical Junction Capacitance (Note 1)	C_J				25				pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$				40				°C/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$				15				°C/W
Operating and Storage Temperature Range	T_J, T_{stg}				-55 to +150				°C

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Units mounted on P.C.B. with 0.5 x 0.5" (13 x 13mm) copper pads

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 - Derating Curve Output Rectified Current

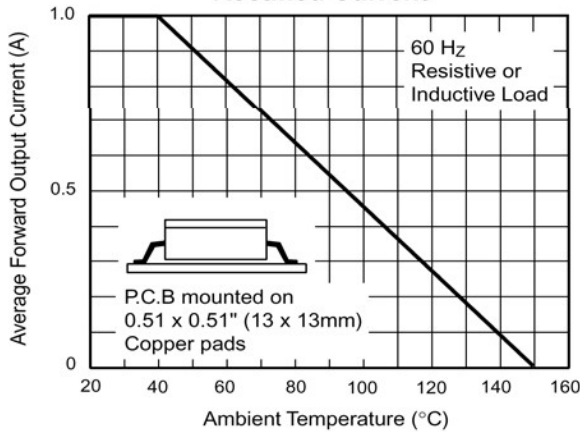


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

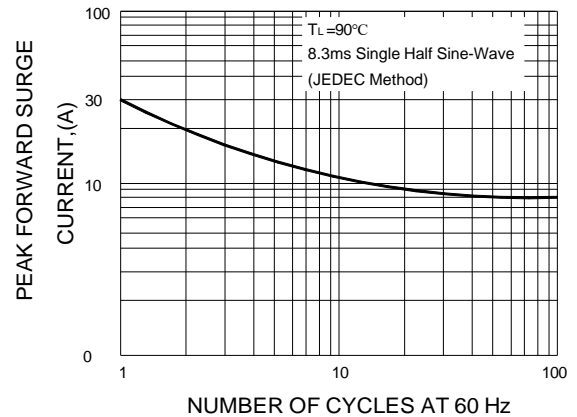


Fig. 3 - Typical Forward Characteristics Per Leg

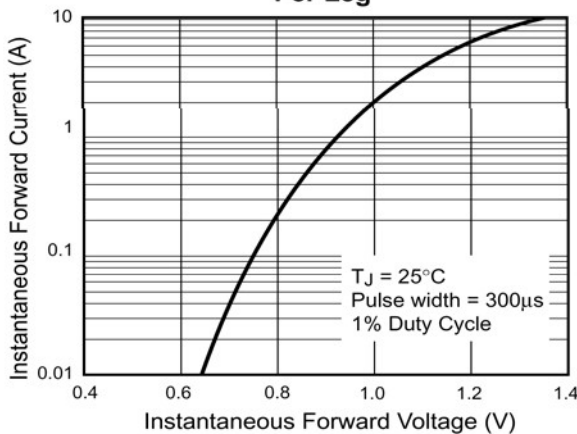


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

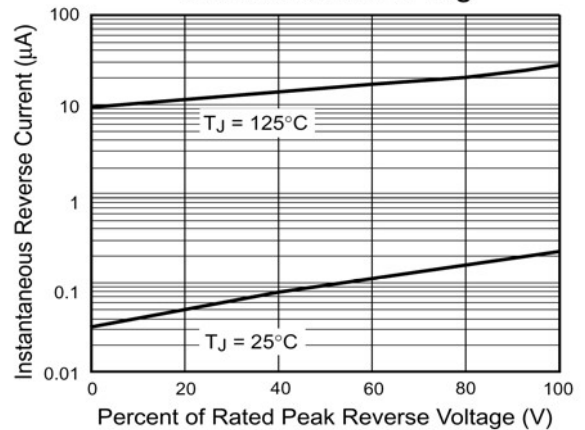


Fig. 5 - Typical Junction Capacitance Per Leg

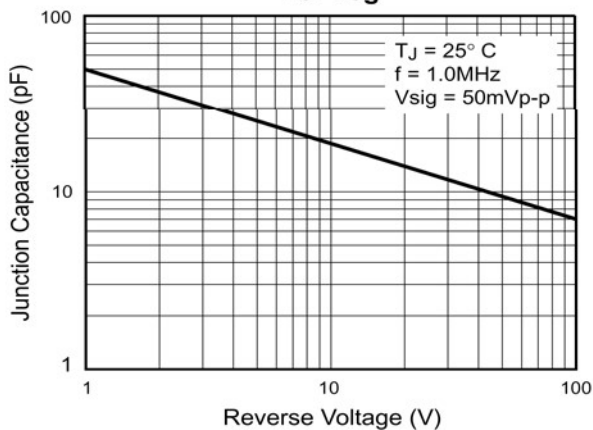


Fig. 6 - Typical Transient Thermal Impedance

