

Features

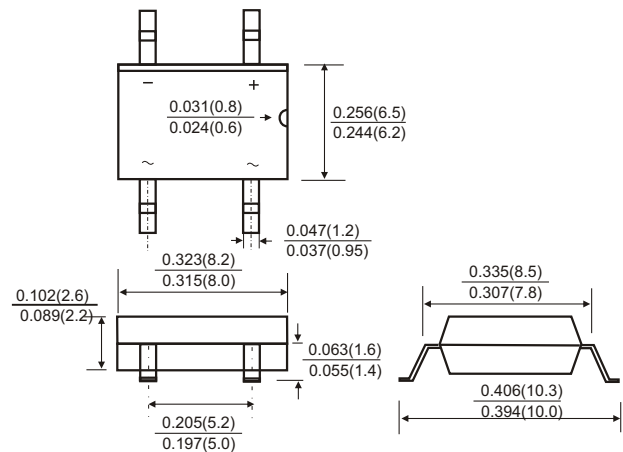
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- Rating to 1000V PRV
- Ideal for printed circuit board
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

Mechanical data

- Case : DBS molded plastic body
- Epoxy : UL94V-0 rated flame retardant
- Terminals : Plated leads solderable per MIL-STD-750, Method 2026
- Mounting Position : Any
- Weight : 0.02ounce, 0.38gram

Voltage Range
50 to 1000 Volts
Current
1.5 Amperes

DFS



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbols	DF 15005SG	DF 1501SG	DF 1502SG	DF 1504SG	DF 1506SG	DF 1508SG	DF 1510SG	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
Maximum Average Forward Rectified Current	$I_{(AV)}$	1.5							Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50							Amps
Maximum Instantaneous Forward Voltage at 1.5A DC	V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^\circ C$	10							μA
	$T_A=125^\circ C$	500							
Typical junction capacitance(Note 1)	C_J	25							pF
Typical thermal resistance(Note 2)	$R_{\theta JA}$	40							K/W
Operating junction and storage temperature range	T_J T_{STG}	-55 to +150							°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0 Volts.

2. Thermal resistance junction to ambient mounted on P.C.B. With 05*0.5 inches(1.3*1.3mm) copper pads

Rating and characteristic curves

FIG. 1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

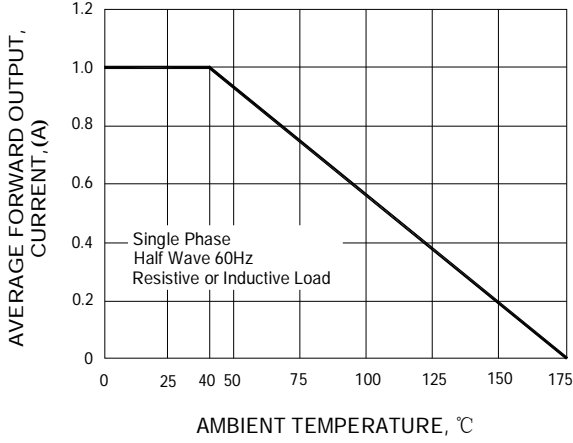


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

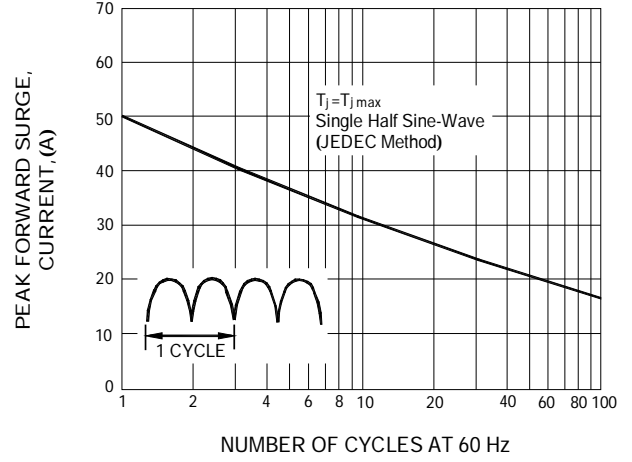


FIG. 3- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

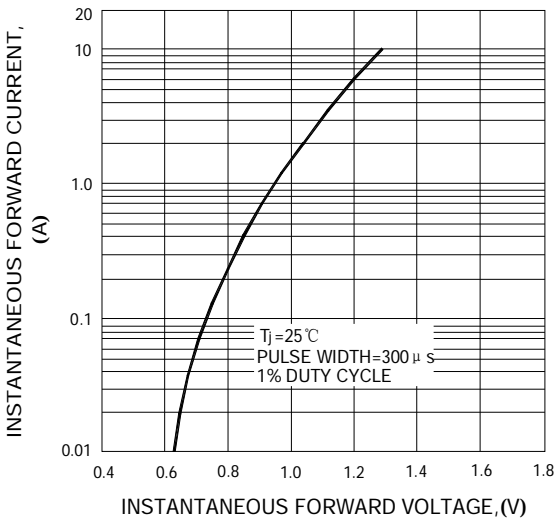


FIG. 4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

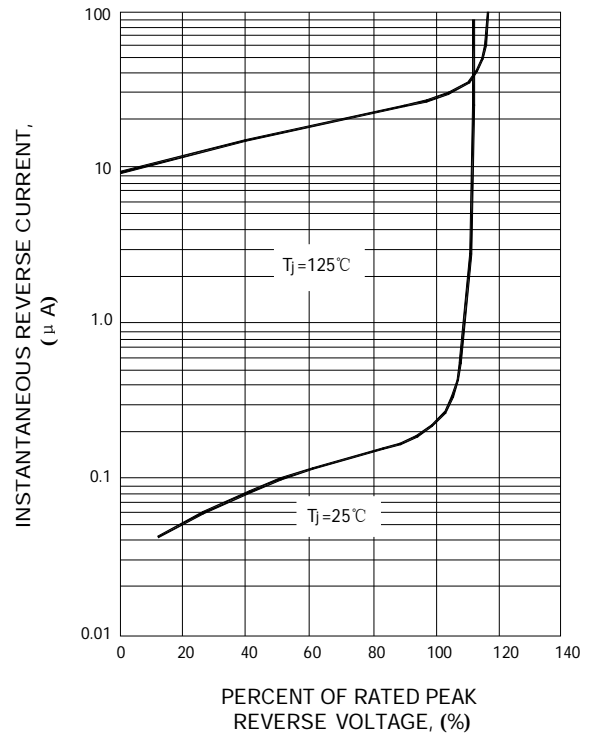


FIG. 5- TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

