

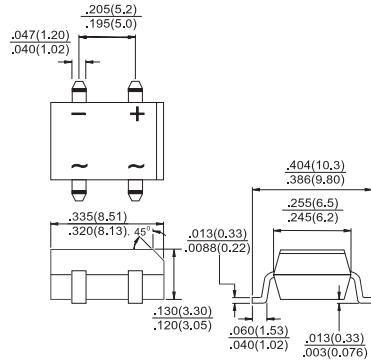


DBS



Features

- ✧ UL Recognized File # E-96005
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction utilizing molded plastic technique
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed: 260 °C / 10 seconds at 5 lbs., (2.3 kg) tension
- ✧ Small size, simple installation
- ✧ Pure tin plated terminal, Lead free. Leads solderable per MIL-STD-202 Method 208
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.



Dimensions in inches and (millimeters)

Marking Diagram



DBS15XG = Specific Device Code
 G = Green Compound
 Y = Year
 WW = Work Week

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

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

For capacitive load derate current by 20%

Type Number	Symbol	DBS 151G	DBS 152G	DBS 153G	DBS 154G	DBS 155G	DBS 156G	DBS 157G	DBS 158G	DBS 159G	Units	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	1200	1400	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	840	980	V	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	1200	1400	V	
Maximum Average Forward Rectified Current @ $T_A = 40^\circ C$	$I_{(AV)}$	1									A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50									A	
Typical Junction Capacitance(Note 1)	C_j	25									pF	
Rating for Fusing ($t < 8.3ms$)	I^2t	10.3									A ² sec	
Maximum Instantaneous Forward Voltage @ 1.5A	V_F	1.1							1.25		V	
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=125^\circ C$	I_R	5.0					500					μA
Typical Thermal Resistance (Note 2)	$R\theta_{JA}$ $R\theta_{JL}$	40					15					$^\circ C/W$
Operating Temperature Range	T_J	-55 to +150									$^\circ C$	
Storage Temperature Range	T_{STG}	-55 to +150									$^\circ C$	

Note: 1. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.

2. Thermal resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.4" x 0.4" (10mm x 10mm) Copper Pads.

RATINGS AND CHARACTERISTIC CURVES (DBS151G THRU DBS159G)

FIG.1- MAXIMUM DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

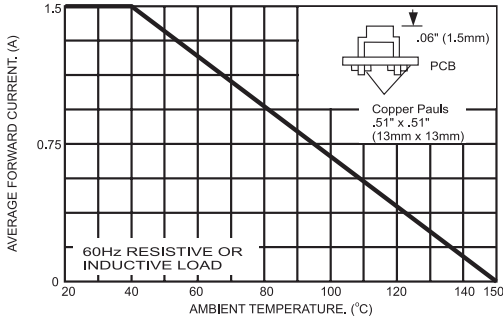


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

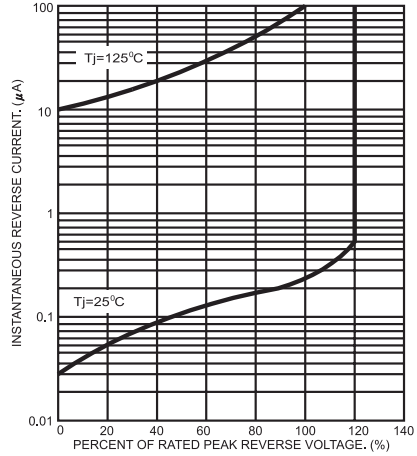


FIG.3- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

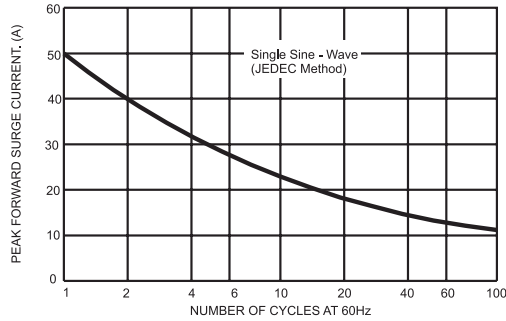


FIG.4- TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

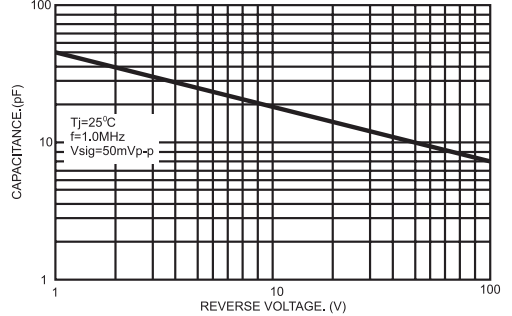


FIG.5- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

