

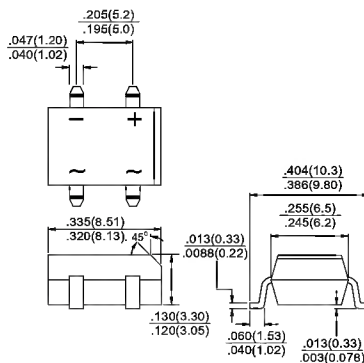
# DBS151G - DBS159G

Single Phase 1.5 AMPS. Glass Passivated Bridge Rectifiers

## 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 <sub>RRM</sub>	50	100	200	400	600	800	1000	1200	1400	V	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	840	980	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	1200	1400	V	
Maximum Average Forward Rectified Current @T <sub>A</sub> = 40 °C	I(AV)	1.5									A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	I <sub>FSM</sub>	50									A	
Rating for Fusing (t<8.3ms)	I <sup>2</sup> t	10.3									A <sup>2</sup> sec	
Maximum Instantaneous Forward Voltage @ 1.5A	V <sub>F</sub>	1.1						1.25			V	
Maximum DC Reverse Current @T <sub>A</sub> =25 °C at Rated DC Blocking Voltage @ T <sub>A</sub> =125 °C	I <sub>R</sub>	5.0					500					uA uA
Typical Thermal Resistance (Note)	R <sub>θJA</sub> R <sub>θJL</sub>	40					15					°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150									°C	
Storage Temperature Range	T <sub>STG</sub>	-55 to +150									°C	

Note: 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

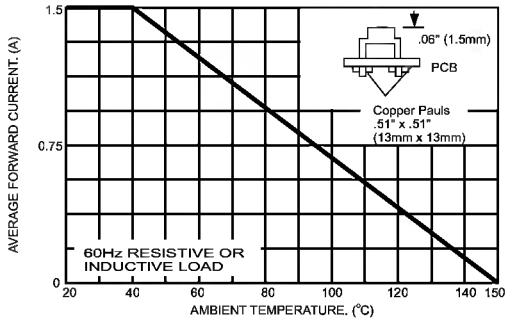


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

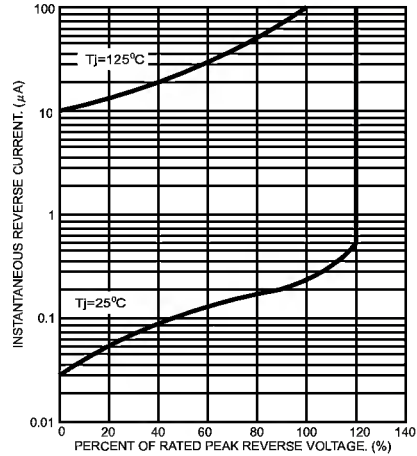


FIG.3- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER BRIDGE ELEMENT

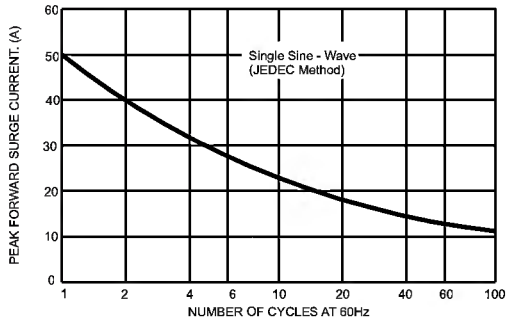


FIG.4- TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

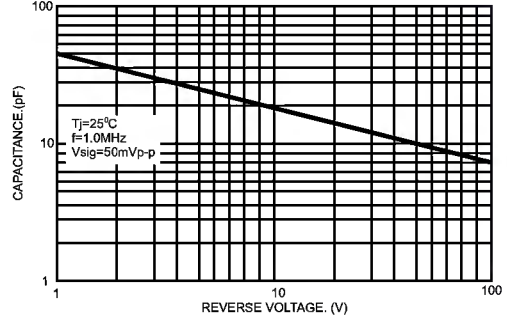


FIG.5- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

