

HDBL151G THRU HDBL159G

Single Phase 1.5 AMPS. Glass Passivated Bridge Rectifiers

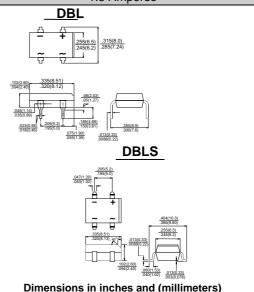




Voltage Range 50 to 1400 Volts Current 1.5 Amperes

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: 250°C / 10 seconds at 5 lbs., (2.3 kg) tension
- ♦ Small size, simple installation



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	HDBL 151G	HDBL 152G	HDBL 153G	HDBL 154G	HDBL 155G	HDBL 156G	HDBL 157G	HDBL 158G	HDBL 159G	Units
	HDBLS 151G	HDBLS 152G	HDBLS 153G	HDBLS 154G	HDBLS 155G	HDBLS 156G	HDBLS 157G	HDBLS 158G	HDBLS 159G	
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	1200	1400	V
Maximum RMS Voltage	35	70	140	280	420	560	700	840	980	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	1200	1400	V
Maximum Average Forward Rectified Current $@T_A = 40^{\circ}C$	1.5									Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	50									Α
Maximum Instantaneous Forward Voltage @ 1.5A	1.1 1.25								V	
Maximum DC Reverse Current @ T _A =25°C	10									uA
at Rated DC Blocking Voltage @ T _A =125°C	500								uA	
Typical Thermal Resistance (Note) RθJA	40									%C/w
RθJL	15									
Operating Temperature Range T _J	-55 to +150									$^{\circ}$
Storage Temperature Range T _{STG}	-55 to +150									ပ္

Note: Thermal resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.51 x 0.51" (13 x 13mm) Copper Pads.



RATINGS AND CHARACTERISTIC CURVES (HDBL151G THRU HDBL159G)

140 150

FIG.1- MAXIMUM DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

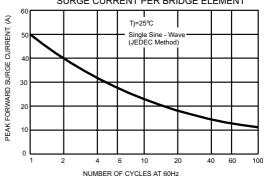
1.5

Copper Pauls
51"x.51"
(13mm x 13mm)

O75

OOHZ RESISTIVE OR INDUCTIVE LOAD







AMBIENT TEMPERATURE. (°C)

40

AVERAGE FORWARD CURRENT. (A)

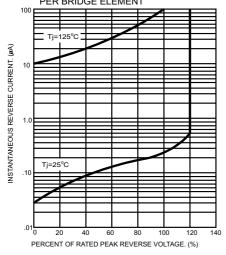


FIG.4- TYPICAL FORWARD CHARACTERISTICS

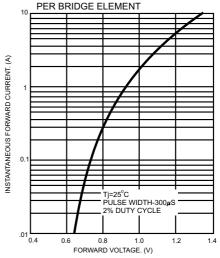


FIG.5- TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

