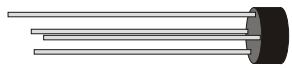
RB150-RB158

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE: 50 - 800V
CURRENT: 1.5 A



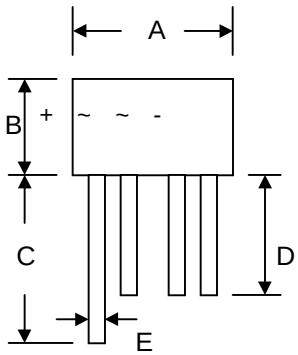
Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards

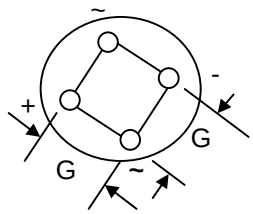
Mechanical Data

- Case: WOB, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 1.1 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

RoHS COMPLIANT



WOB		
Dim	**Min**	**Max**
A	8.60	9.10
B	5.0	5.50
C	27.9	—
D	25.4	—
E	0.71	0.81
G	4.60	5.60
All Dimensions in mm		



Maximum Ratings and Electrical Characteristics

T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

RATING	SYMBOL	RB150	RB151	RB152	RB154	RB156	RB158	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	Volts
Maximum Average Forward Current Tc=50°C	$I_{F(AV)}$	1.5						Amps.
Peak Forward Surge Current, Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	40						Amps.
Maximum Forward Voltage per Diode at I_F = 1 Amp.	V_F	0.95						Volt
Maximum DC Reverse Current Ta = 25 °C	I_R	10						µA
at Rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	100						µA
Typical Thermal Resistance (Note 1)	RθJL	15						°C/W
Operating Junction Temperature Range	T_J	- 40 to + 140						°C
Storage Temperature Range	T_{STG}	- 40 to + 140						°C

Notes :

1) Thermal resistance from Junction to lead mounted on P.C. Board with 0.47" X 0.47" (12mm X 12mm) Cu pads.

RATING AND CHARACTERISTIC CURVES (RB150 - RB158)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

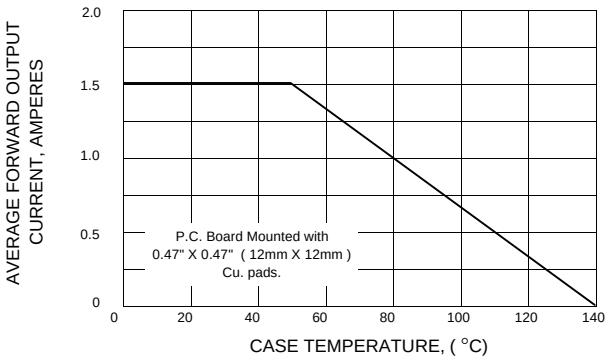


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

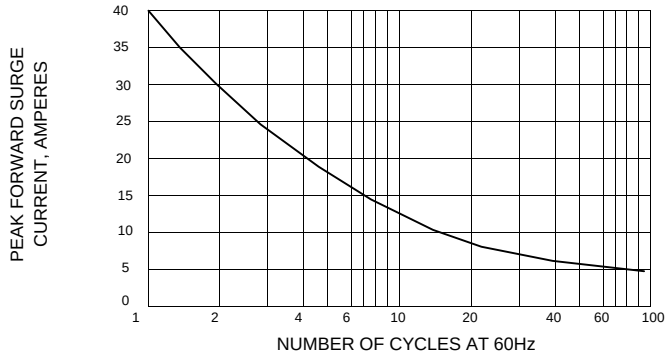


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

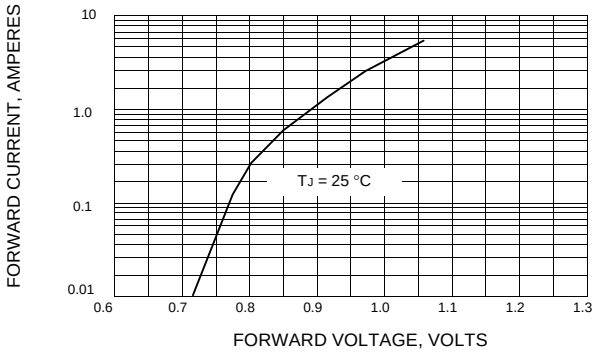


FIG.4 - TYPICAL REVERSE CHARACTERISTICS