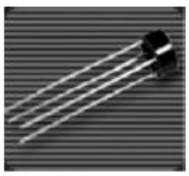
SYNSEMI SEMICONDUCTOR

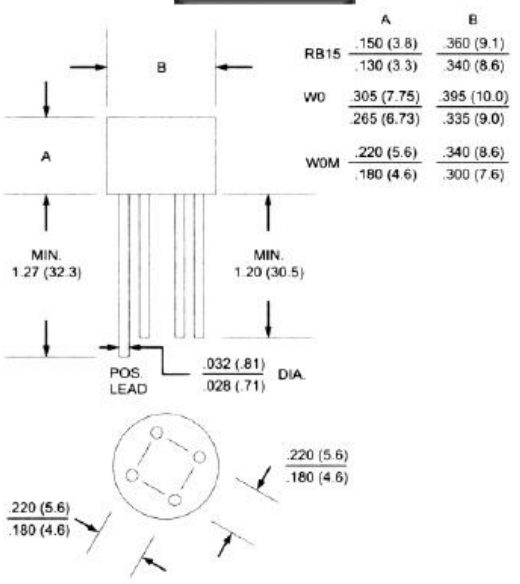
RB / W0 / W0M Series

Glass Passivated Single-Phase Bridge Rectifiers
Voltage Range 50 to 1000 Volts Forward Current 1.5 Amperes

Features

- Surge overload rating - 50 Amperes peak
- Ideal for printed circuit boards
- Reliable low cost construction utilizong molded plastic technique results in expersive product
- Mounting Position: Any





Dimensions in inches and (millimeters

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%

Parameter	Symbols	RB151 W005 W005M	RB152 W01 W01M	RB153 W02 W02M	RB154 W04 W04M	RB155 W06 W06M	RB156 W08 W08M	RB157 W10 W10M	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 at T_A=25°C	$I_{F(AV)}$	1.5							Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0							Amps
Rating for fusing (t < 8.3ms)	I^2t	5.0							A^2sec
Max. instantaneous forward voltage drop per element at 1.0A	V_F	1.0							Volt
Maximum DC reverse current at rated DC blocking voltage per element T_A=25°C / T_A=100°C	I_R	10.0 / 1.0							uA / mA
Operating temperature range	T_J	-55 to +125							°C
Storage temperature range	T_{STG}	-55 to +150							°C

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RATINGS AND CHARACTERISTIC CURVES

(T_A = 25°C unless otherwise noted)

FIG. 1 - MAXIMUM FORWARD SURGE CURRENT

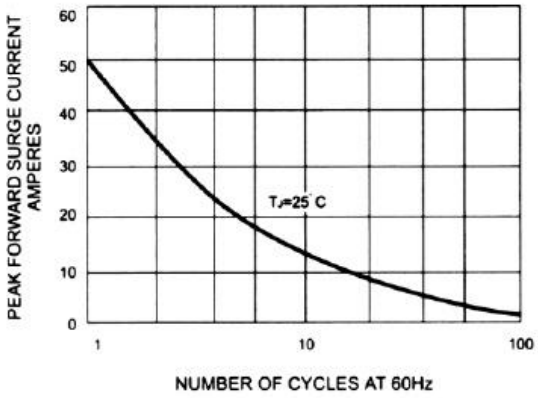

FIG. 2 - DERATING CURVE OUTPUT RECTIFIED CURRENT

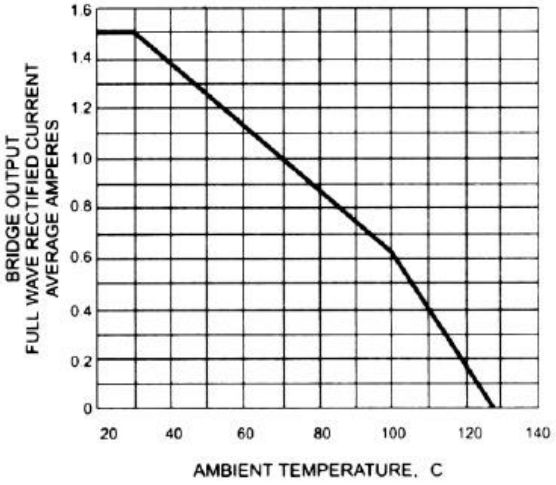

FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

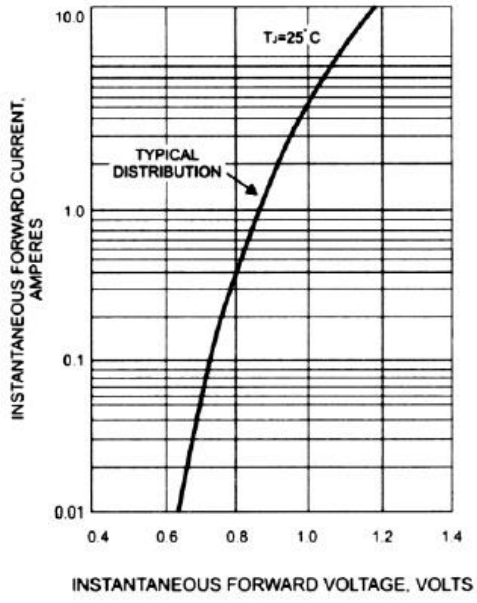

FIG. 4 - TYPICAL REVERSE CHARACTERISTICS