

WILLAS

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

**RB151
THRU
RB157**

VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.5 Amperes

Pb Free Product

FEATURES

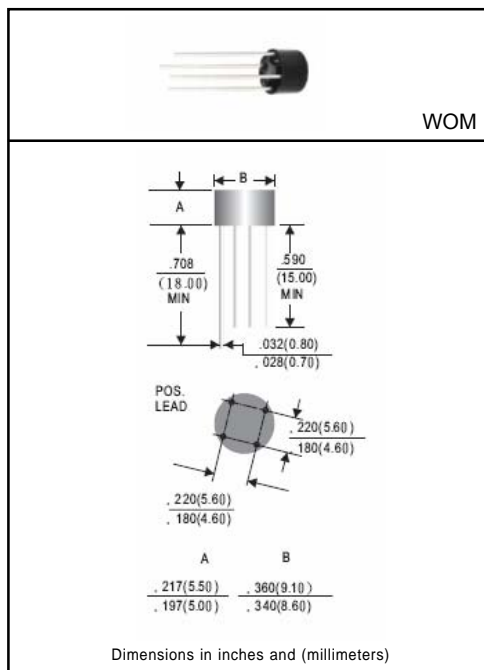
- * High reverse voltage to 1000v
- * Surge overload ratings to 50 amperes peak
- * Good for printed circuit board assembly
- * Weight: 1.2 grams
- * Silver-plated copper leads

MECHANICAL DATA

- * UL listed the recognized component directory, file #E195711
- * Epoxy: Device has UL flammability classification 94V-0

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	RB151	RB152	RB153	RB154	RB155	RB156	RB157	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input 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 Output Current at TA = 25°C	I _O	1.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	50							Amps
Operating Temperature Range	T _J	-55 to + 125							°C
Storage Temperature Range	T _{STG}	-55 to + 150							°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	RB151	RB152	RB153	RB154	RB155	RB156	RB157	UNITS
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC	V _F	1.0							Volts
Maximum Reverse Current at Rated DC Blocking Voltage per element	@ TA = 25°C	10							uAmps
	@ TA = 100°C	1							mAmps

RATING AND CHARACTERISTIC CURVES (RB151 THRU RB157)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

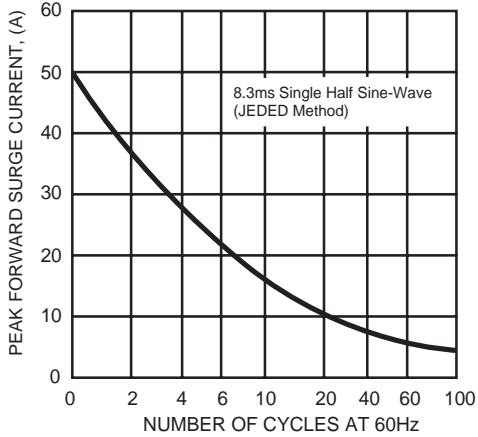


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

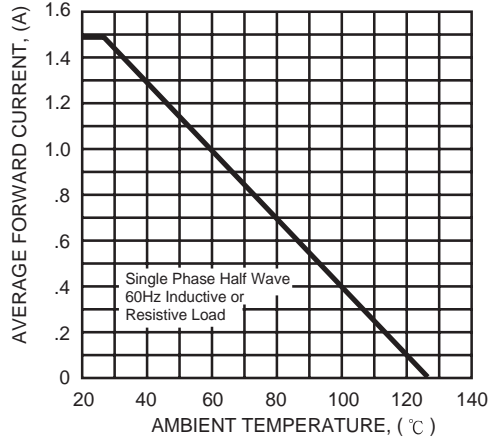


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

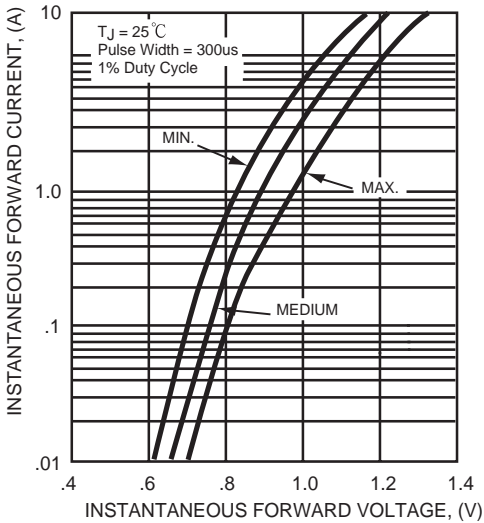


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

