



SINGLE PHASE BRIDGE RECTIFIER

RB151 THRU RB157

VOLTAGE RANGE
CURRENT

50 to 1000 Volts
1.5 Ampere

FEATURES

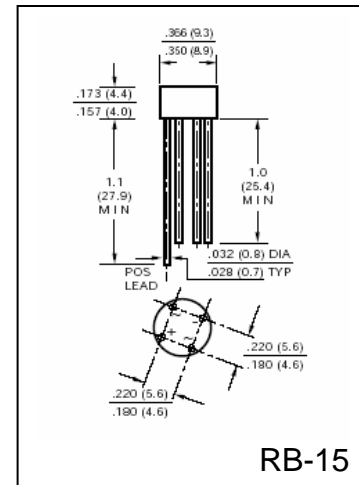
- Plastic package has UL flammability Classification 94V-0
- This series UL recognized
- High Surge current capability
- High temperature soldering guaranteed: 260°C / 10 seconds

MECHANICAL DATA

- Case: Molded plastic body
- Terminal: Plated leads solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.04 ounce, 1.15 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%



	SYMBOLS	RB151	RB152	RB153	RB154	RB155	RB156	RB157	UNIT
Maximum Repetitive 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 $T_C = 25^\circ\text{C}$ (Note 1)	$I_{(AV)}$	1.5							Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	50							Amps
Rating for Fusing ($t < 8.3\text{mS}$)	I^2t	10							A^2s
Maximum Instantaneous Forward Voltage per element at 1.0A	V_F	1.0							Volts
Maximum DC Reverse Current at Rated $T_A = 25^\circ\text{C}$	I_R	10							μA
DC Blocking Voltage per element $T_A = 100^\circ\text{C}$		500							
Typical Junction Capacitance, per leg (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C_J	15							pF
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JA}$	40							$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	(-55 to +125)							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	(-55 to +150)							$^\circ\text{C}$

Notes:

1. Mounted on PCB with 0.22" x 0.22" (5.5mm x 5.5mm) copper pads and 0.375" (9.5mm) lead length



RATINGS AND CHARACTERISTIC CURVES RB151 THRU RB157

FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

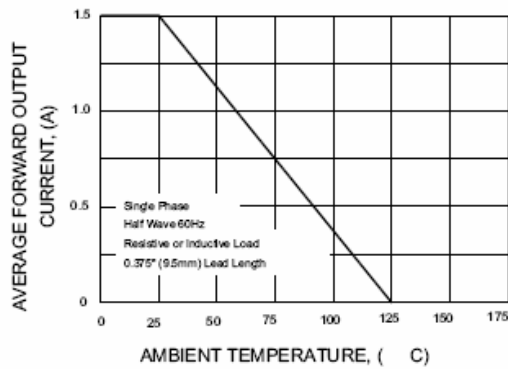


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

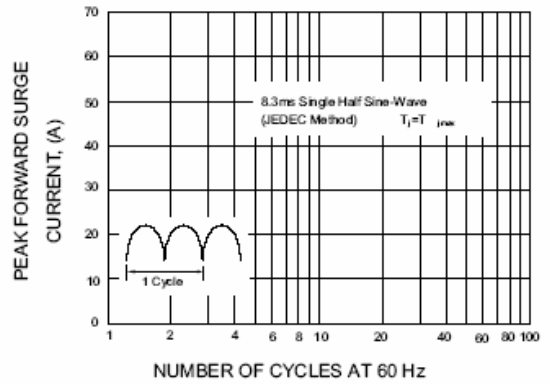


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

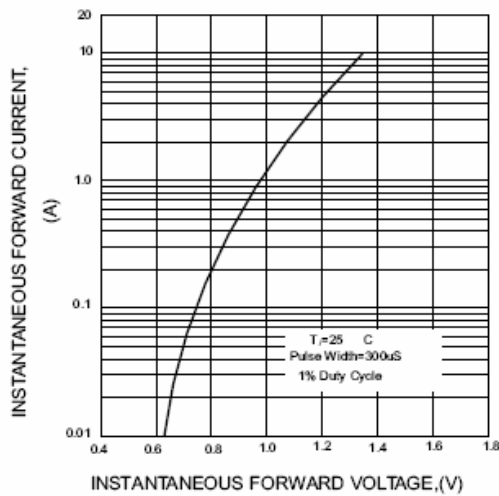


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

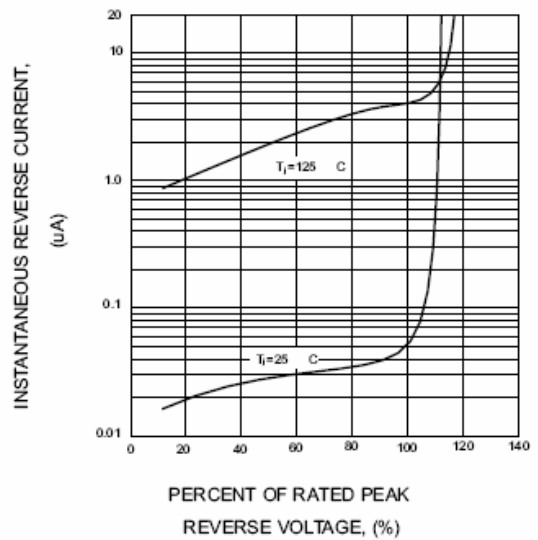


FIG.5-TYPICAL JUNCTION CAPACITANCE
PER BRIDGE ELEMENT

