

# LITEON POWER SEMICONDUCTORS PBDF151 thru PBDF157

1.5 AMPERES SILICON BRIDGE RECTIFIERS

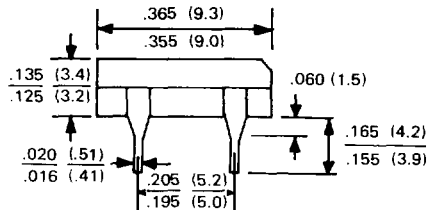
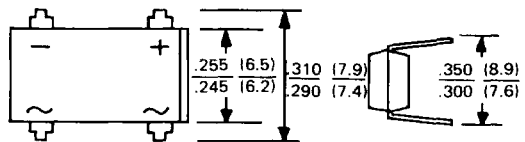


VOLTAGE RANGE  
50 to 1000 Volts  
CURRENT  
1.5 Amperes

## FEATURES

- Rating to 1000V PRV
- Surge overload rating to 40 Amperes peak.
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- UL Recognized file # E95060
- Lead solderable per MIL-STD-202 method 208
- Leads: silver plated copper, soldered plated
- Plastic material has UL flammability classification 94V-0
- Polarity symbols molded on body
- Weight: 0.02 ounce (0.45 grams)

## PBDF



Dimensions in inches (millimeters)

## 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%.

		PBDF 151	PBDF 152	PBDF 153	PBDF 154	PBDF 155	PBDF 156	PBDF 157	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	60	100	200	400	600	800	1000	V
Maximum Average Forward Output Current @ $T_A = 50^\circ C$	$I_{(AV)}$	1.5							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	40							A
Maximum DC Forward Voltage drop per element at 1.0A DC	$V_F$	1.1							V
Maximum DC Reverse Current at rated @ $T_A = 25^\circ C$ DC Blocking Voltage per element @ $T_A = 100^\circ C$	$I_R$	5 0.5							$\mu A$ mA
$I^2 t$ Rating for fusing ( $t < 8.3ms$ )	$I^2 t$	6.6							$A^2 S$
Operating Temperature Range	$T_J$	-55 to +125							$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ C$

FIG. 1: PEAK FORWARD SURGE CURRENT

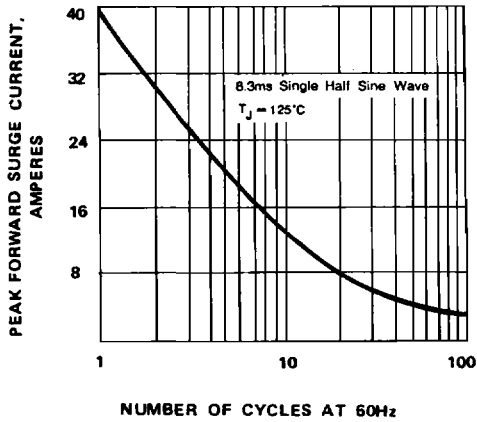


FIG. 2: FORWARD DERATING CURVE

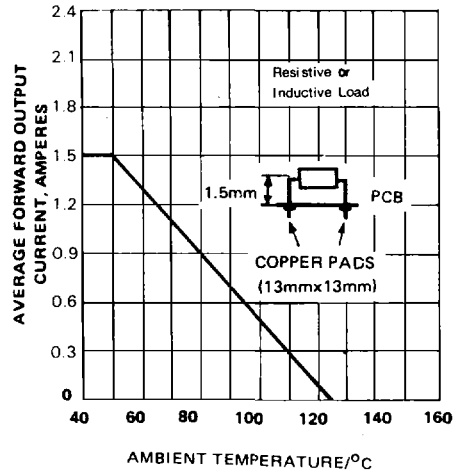


FIG. 3: TYPICAL FORWARD CHARACTERISTIC

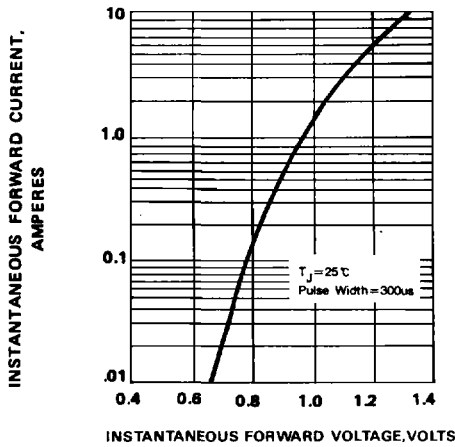


FIG. 4: TYPICAL REVERSE CHARACTERISTIC

