

Surface Mount Glass Passivated Fast Recovery Bridge Rectifiers
Reverse Voltage 100 to 1000 Volts Forward Current 1.5 Amperes

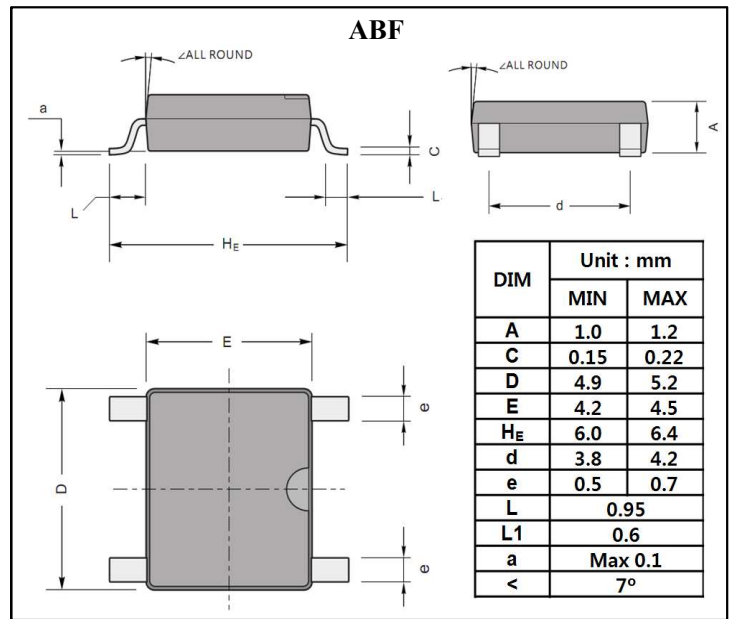
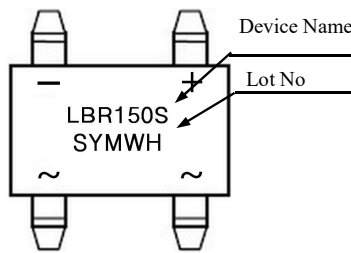
Features

- Glass passivated junction chip
- Ideally suited for automatic assembly
- Save space on printed circuit boards
- Body thickness very thin <1.3mm
- Low forward voltage drop
- Surge overload rating to 50A peak
- In compliance with EU RoHS 2002/95/EC directives
- Plastic material used carries underwriters laboratory classification 94V-O
- High temperature soldering : 260°C /10 seconds at terminals

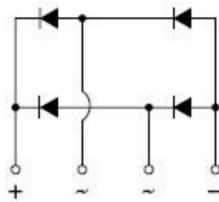
Mechanical Data

- Case : ABF, Molded plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Polarity : As marked on case
- Marking : Type number
- Weight : 0.090 grams (Approx.)

Marking



Equivalent Circuit



Maximum Ratings & Electrical Characteristics (If not specified Ta =25°C)

Parameter	Symbol	LBR 151S	LBR 152S	LBR 154S	LBR 156S	LBR 158S	LBR 150S	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current	I_O	1.5						A	
Peak Forward Surge Current (60Hz sine wave, Non-repetitive 1 cycle peak value, $T_J=25^\circ C$)	I_{FSM}	50						A	
Maximum Instantaneous Forward Voltage @ 1.5A	V_F	1.3						V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5.0						μA	$T_a=25^\circ C$
		50						μA	$T_a=125^\circ C$
Typical Junction Capacitance	C_J	30						pF	Note 1
Maximum Reverse Recovery Time	t_{rr}	160						ns	Note 2
Operation Junction Temperature Range	T_J	-55 to +150						$^\circ C$	
Storage Temperature Range	T_{STG}	-55 to +150						$^\circ C$	

Note 1. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.

Note 2. Measured with $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$



Ratings and Characteristics Curves ($T_a=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

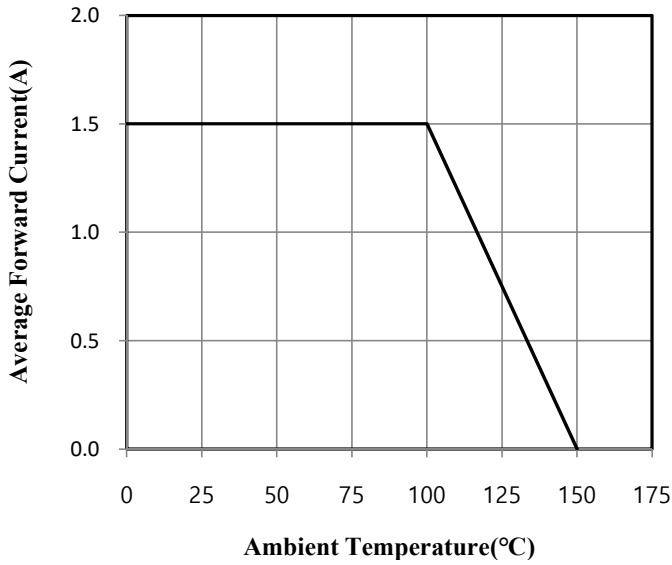


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

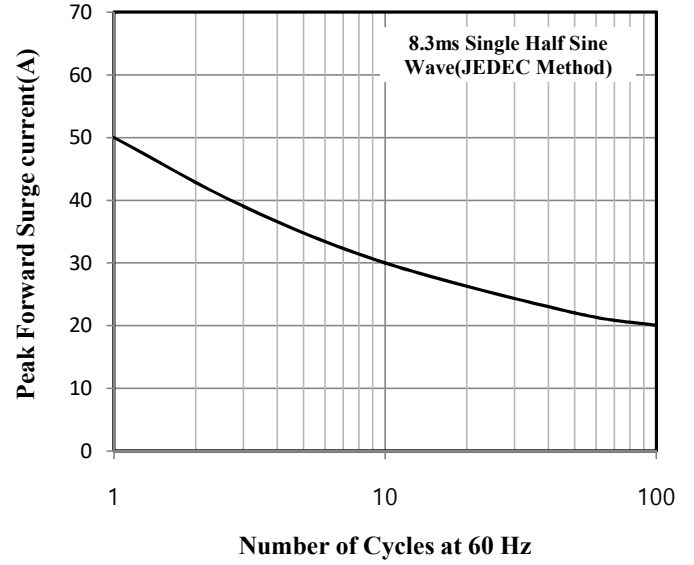


Fig.3 Typical Instantaneous Forward Characteristics

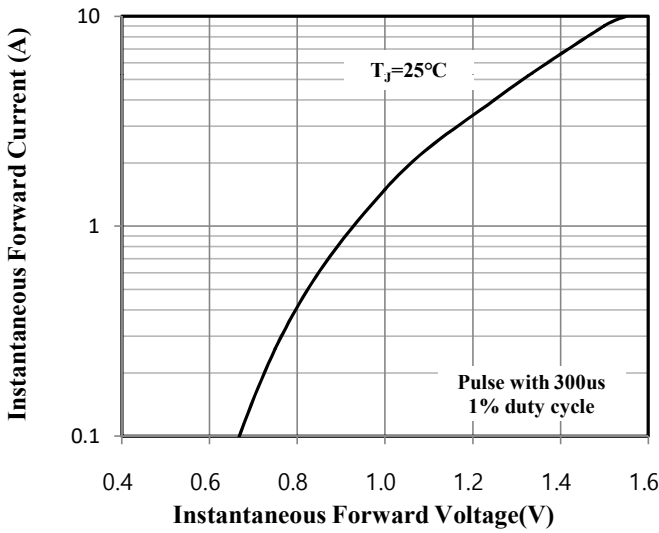


Fig.4 Typical Junction Capacitance

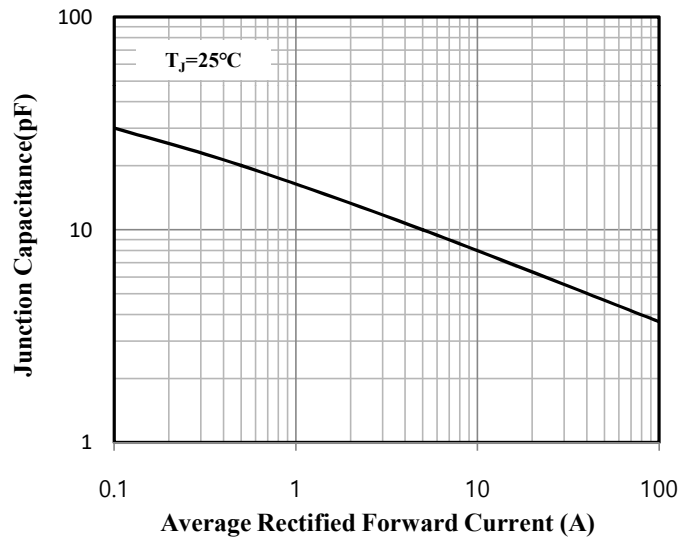


Fig.5 Typical Reverse Characteristics

