

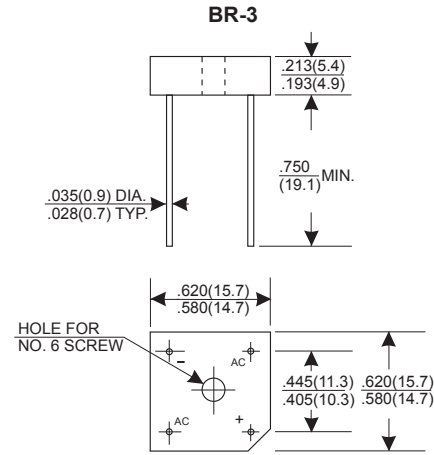
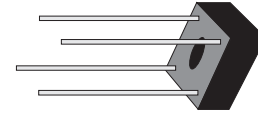
VOLTAGE RANGE: 50 - 1000V
CURRENT: 3.0 A

Features

- Diffused junction
- High current capability
- High case dielectric strength
- High surge current capability
- Ideal for printed circuit board application
- Plastic material has underwriters laboratory flammability classification 94V-O

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated leads solderable per
- MIL-STD-202, Method 208
- Polarity: Marked on body



Dimensions in inches and (millimeters)

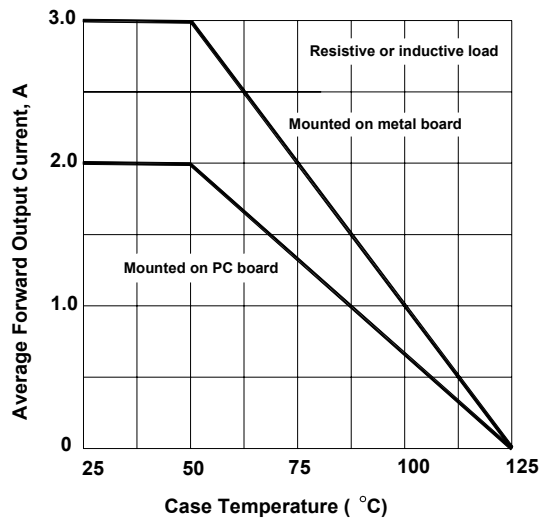
Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

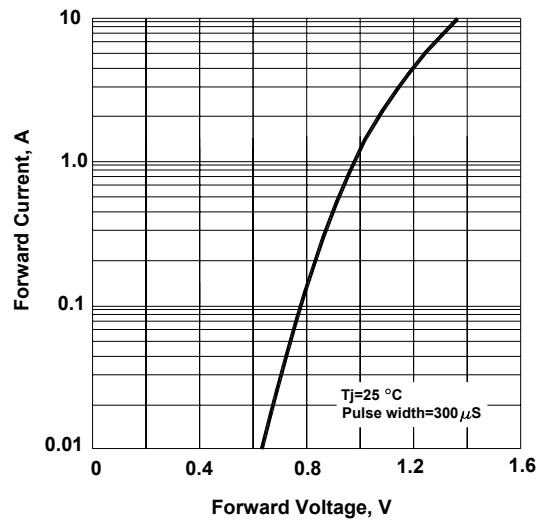
Characteristic	Symbol	BR 305	BR 31	BR 32	BR 34	BR 36	BR 38	BR 310	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Average rectified output current (note1)at T _C = 50°C	I _O	3.0							A
Non-repetitive Peak forward surge current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I _{FSM}	50							A
Maximum instantaneous forward voltage drop per leg at 1.5A	V _F	1.2							V
Maximum DC reverse current at rated DC blocking voltage per leg	I _R	10							uA
T _C = 100°C		1.0							mA
Rating for fusing (t<8.3ms)(note 2)	I ² t	10							A ² s
Typical junction capacitance(note3)	C _j	55							pF
Typical thermal resistance per leg (note 4)	R _{θJC}	25							K/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +125							°C

- Notes:
1. Mounted on metal chassis
 2. Non-repetitive, for t>1ms and <8.3ms
 3. Measured at 1.0MHz and applied reverse voltage of 4.0V.DC
 4. Thermal resistance junction to case per element

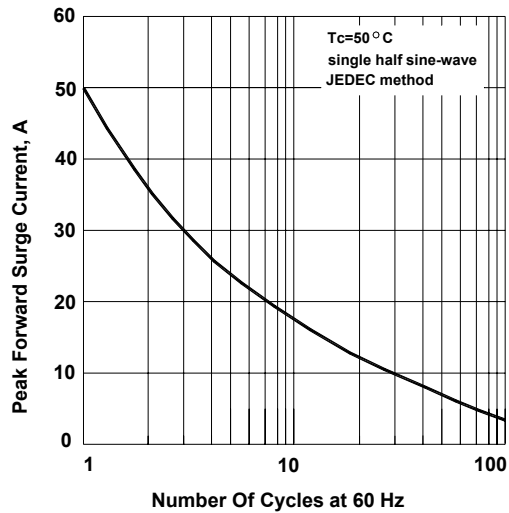
Forward Current Derating Curve



Typical Forward Characteristics, per element



Max Non-repetitive Peak Forward Surge Current



Typical Reverse Characteristics, per element

