

BR305 THRU BR310

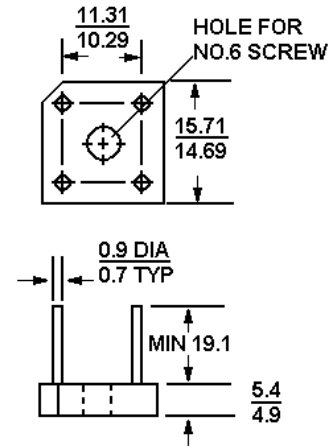
3.0A BRIDGE RECTIFIERS

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 mm

Absolute Maximum Ratings and Characteristics

Rating 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%.

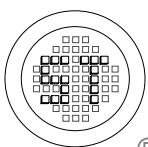
	Symbols	BR 305	BR 31	BR 32	BR 34	BR 36	BR 38	BR 310	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Average rectified output current (note1) at $T_C = 50^\circ C$	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 1.0							uA mA
Rating for fusing ($t < 8.3ms$)(note 2)	I^2t	10							A ² s
Typical junction capacitance(note3)	C_j	55							pF
Typical thermal resistance per leg (note 4)	$R_{\theta JC}$	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 $< 8.3ms$

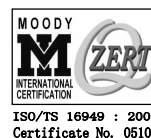
3. Measured at 1.0MHz and applied reverse voltage of 4.0V.DC

4. Thermal resistance junction to case per element



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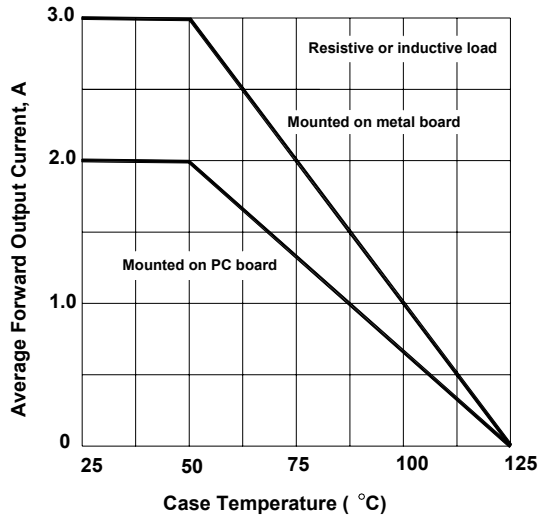
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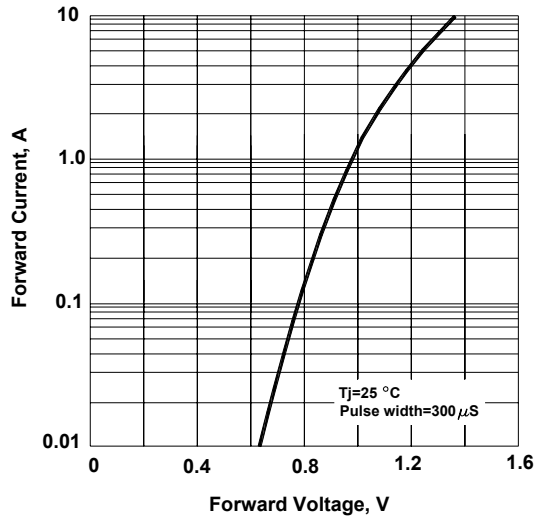
Dated : 11/12/2003

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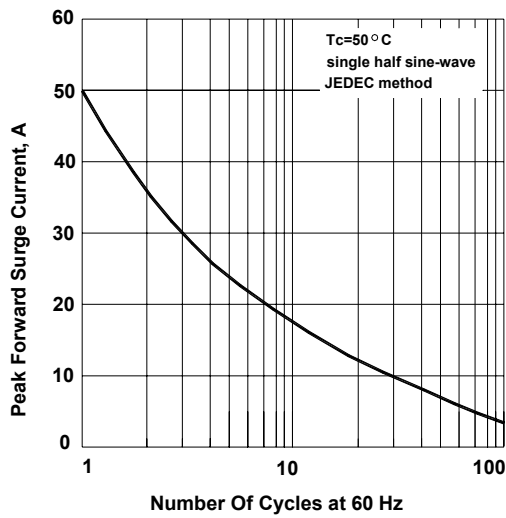
Forward Current Derating Curve



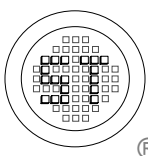
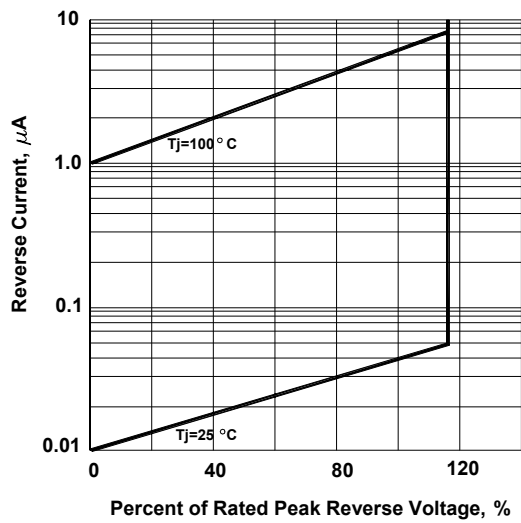
Typical Forward Characteristics, per element



Max Non-repetitive Peak Forward Surge Current

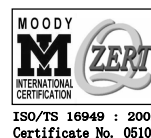


Typical Reverse Characteristics, per element



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ISO/TS 16949 : 2002
Certificate No. 05103

ISO 14001
Certificate No. 7116

ISO 9001 : 2000
Certificate No. 6509-1999-00-002-001

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