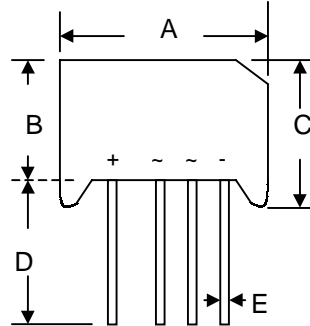


### Features

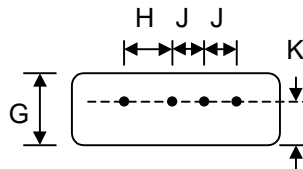
- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards



| RS-5                 |        |        |
|----------------------|--------|--------|
| Dim                  | Min    | Max    |
| A                    | 39.40  | 40.10  |
| B                    | 20.20  | 21.00  |
| C                    | 21.00  | 21.70  |
| D                    | 25.40  | —      |
| E                    | 0.97 Ø | 1.07 Ø |
| G                    | 6.20   | 6.70   |
| H                    | 9.80   | 10.20  |
| J                    | 7.20   | 7.60   |
| K                    | 4.60   | 5.00   |
| All Dimensions in mm |        |        |

### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 25.3 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

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

| Characteristic  | Symbol          | B40C3700/<br>2200 | B80C3700/<br>2200 | B125C3700/<br>2200 | B250C3700/<br>2200 | B380C3700/<br>2200 | Unit |                      |
|---|-----------------|-------------------|-------------------|--------------------|--------------------|--------------------|------|----------------------|
| Peak Repetitive Reverse Voltage   | $V_{RRM}$       |                   |                   |                    |                    |                    | V    |                      |
| Working Peak Reverse Voltage  | $V_{RWM}$       | 100               | 200               | 300                | 600                | 900                | V    |                      |
| DC Blocking Voltage   | $V_R$           |                   |                   |                    |                    |                    | V    |                      |
| Recommend Input Voltage   | $V_{RMS}$       | 40                | 80                | 125                | 250                | 380                | V    |                      |
| Average Rectified Output Current<br>@ $T_A = 45^\circ\text{C}$ (Note 1)   | $I_O$           | 3.7               |                   |                    |                    |                    |      | A                    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on<br>rated load (JEDEC Method) | $I_{FSM}$       | 100               |                   |                    |                    |                    |      | A                    |
| Repetitive Peak Forward Surge Current   | $I_{FRM}$       | 15                |                   |                    |                    |                    |      | A                    |
| Forward Voltage (per element) @ $I_F = 3.0\text{A}$   | $V_{FM}$        | 1.0               |                   |                    |                    |                    |      | V                    |
| Peak Reverse Current @ $T_C = 25^\circ\text{C}$<br>At Rated DC Blocking Voltage @ $T_C = 150^\circ\text{C}$           | $I_R$           | 10<br>6.0         |                   |                    |                    |                    |      | $\mu\text{A}$<br>mA  |
| Rating for Fusing ( $t < 8.3\text{ms}$ ) (Note 2)   | $I_t^2$         | 50                |                   |                    |                    |                    |      | $\text{A}^2\text{s}$ |
| Typical Thermal Resistance (Note 1)   | $R_{\theta JA}$ | 3.0               |                   |                    |                    |                    |      | K/W                  |
| Operating and Storage Temperature Range   | $T_j, T_{STG}$  | -55 to +150       |                   |                    |                    |                    |      | $^\circ\text{C}$     |

**\*Glass Passivated forms are available upon request.**

Note: 1. Measured at 3"sq. x 0.11" thick AL. plate.  
2. Non-repetitive for  $t > 1\text{ms}$  and  $< 8.3\text{ms}$ .

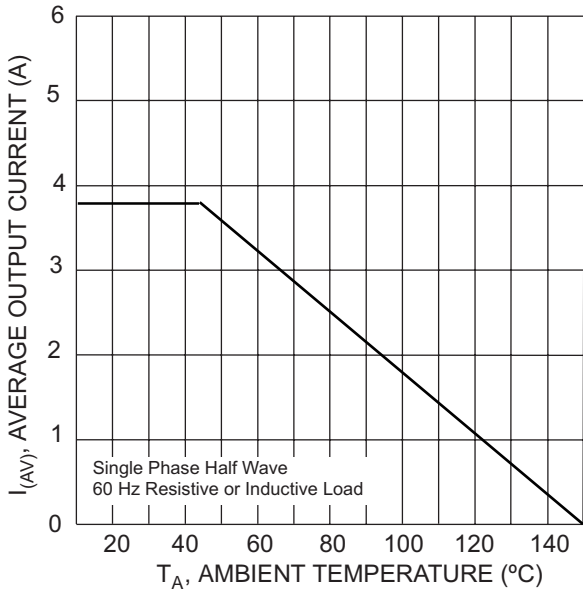


Fig. 1 Forward Current Derating Curve

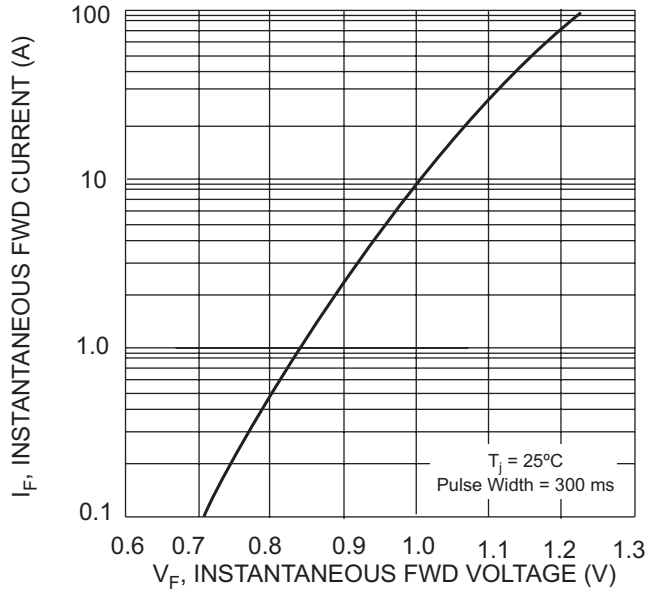


Fig. 2 Typical Forward Characteristics, per element

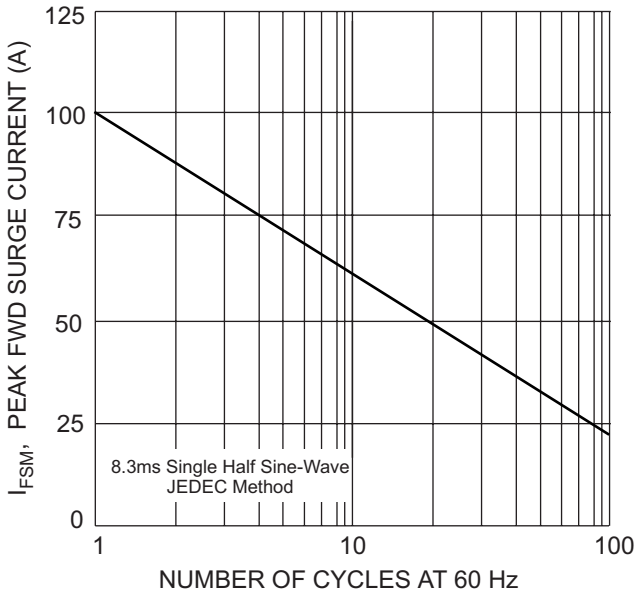


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

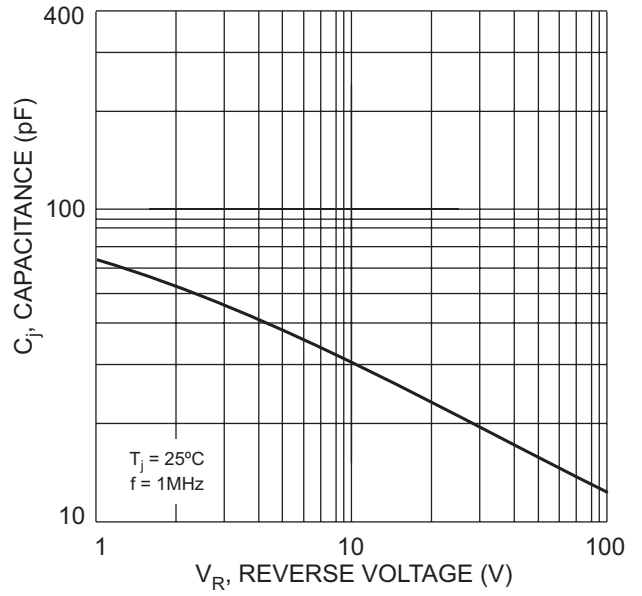


Fig. 4 Typical Junction Capacitance Per Element



Fig. 5 Typical Reverse Characteristics

## ORDERING INFORMATION

| Product No.    | Package Type | Shipping Quantity |
|----------------|--------------|-------------------|
| B40C3700/2200  | SIL Bridge   | 200 Units/Box     |
| B80C3700/2200  | SIL Bridge   | 200 Units/Box     |
| B125C3700/2200 | SIL Bridge   | 200 Units/Box     |
| B250C3700/2200 | SIL Bridge   | 200 Units/Box     |
| B380C3700/2200 | SIL Bridge   | 200 Units/Box     |

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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**Email:** sales@wontop.com

**Internet:** <http://www.wontop.com>

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