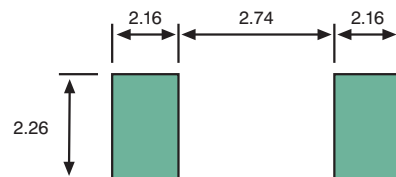


## FEATURES

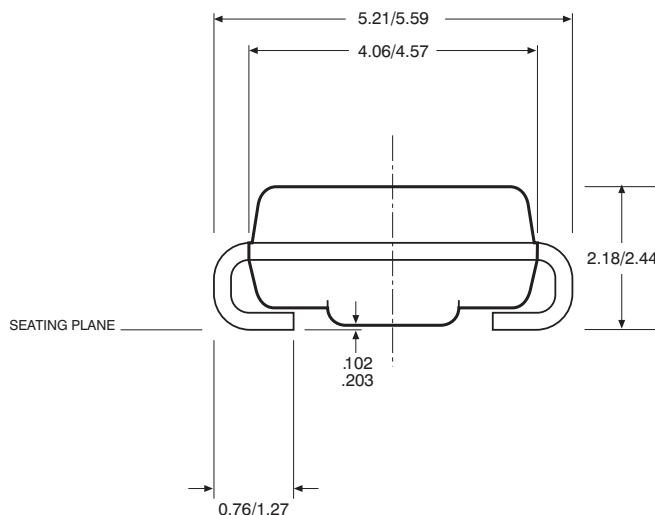
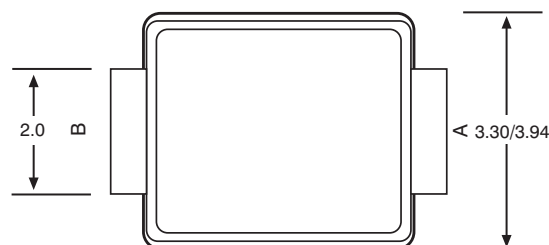
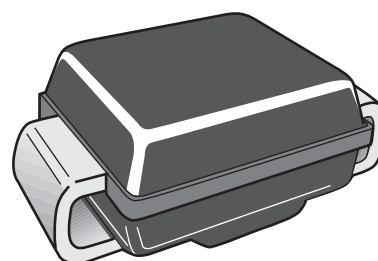
- Bi-directional transient voltage protection
- Glass passivated junction
- Nano second clamping response
- Surge capability up to 250 (Amps)
- No performance degradation under service life
- Industry standard DO-214AA Jedec outline
- Available on tape (12mm)
- UL recognised

## MECHANICAL CHARACTERISTICS

- Transfer molded, void free epoxy body
- Terminals: modified 'J' bend for large contact area
- Tin/Lead plated leads
- Maximum case temperature for soldering purposes: 230°C for 10 seconds
- Standard packaging: 12mm tape (meets EIA 481-1)
- Device marking, device code, logo



Solder Pads  
All dimensions in mm



**ELECTRICAL CHARACTERISTICS @ 25°C Tamb**

| SYMBOL          | PARAMETER         |                 |                   |
|-----------------|-------------------|-----------------|-------------------|
| V <sub>RM</sub> | Stand-off voltage | I <sub>RM</sub> | Stand-off current |
| V <sub>BR</sub> | Breakdown voltage | I <sub>BO</sub> | Breakover current |
| V <sub>BO</sub> | Breakover voltage | I <sub>H</sub>  | Holding current   |
| V <sub>T</sub>  | On-state voltage  |                 |                   |

**ABSOLUTE RATINGS**

| SYMBOL           | PARAMETER                                                           |                   | VALUE       |        |            |
|------------------|---------------------------------------------------------------------|-------------------|-------------|--------|------------|
|                  |                                                                     |                   | Type A      | Type B |            |
| I <sub>pp</sub>  | Peak Pulse Current                                                  | 10/1000 $\mu$ sec | 50          | 100    | A          |
|                  |                                                                     | 8-20 $\mu$ s expo | 150         | 250    | A          |
| I <sub>tsm</sub> | Non-repetitive surge peak on-state current                          | tp20 ms           | 30          |        | A          |
| di/dt            | Critical rate of rise of on-state current                           | Non-repetitive    | 100         |        | A/ $\mu$ s |
| T <sub>stg</sub> | Storage and operating junction temperature range                    |                   | -40 to +150 |        | °C         |
| T <sub>j</sub>   |                                                                     |                   | 150         |        | °C         |
| TL               | Maximum temperature for soldering<br>(For period of 10 seconds max) |                   | 230         |        | °C         |

| Device Type     | V <sub>rm</sub> | I <sub>rm</sub><br>@ V <sub>rm</sub><br>( $\mu$ A) | V <sub>br</sub><br>MIN | V <sub>bo</sub><br>MAX | V <sub>t</sub><br>TYP<br>@ 1A | I <sub>bo</sub><br>TYP<br>(mA) | I <sub>h</sub><br>MIN<br>(mA) |
|-----------------|-----------------|----------------------------------------------------|------------------------|------------------------|-------------------------------|--------------------------------|-------------------------------|
| SMTBJ050 A or B | 50              | 1                                                  | 60                     | 80                     | <2V                           | 50                             | 150                           |
| SMTBJ070 A or B | 70              | 1                                                  | 80                     | 120                    | <2V                           | 50                             | 150                           |
| SMTBJ100 A or B | 100             | 1                                                  | 110                    | 135                    | <2V                           | 50                             | 150                           |
| SMTBJ120 A or B | 120             | 1                                                  | 140                    | 165                    | <2V                           | 50                             | 150                           |
| SMTBJ170 A or B | 170             | 1                                                  | 180                    | 215                    | <2V                           | 50                             | 150                           |
| SMTBJ200 A or B | 200             | 1                                                  | 220                    | 265                    | <2V                           | 50                             | 150                           |

All parameters are tested using Fet Test™ Model 3600.