



# BD340YS~BD3200YS

## THROUGH HOLE SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 40 to 200 Volts **CURRENT** 3.0 Ampere

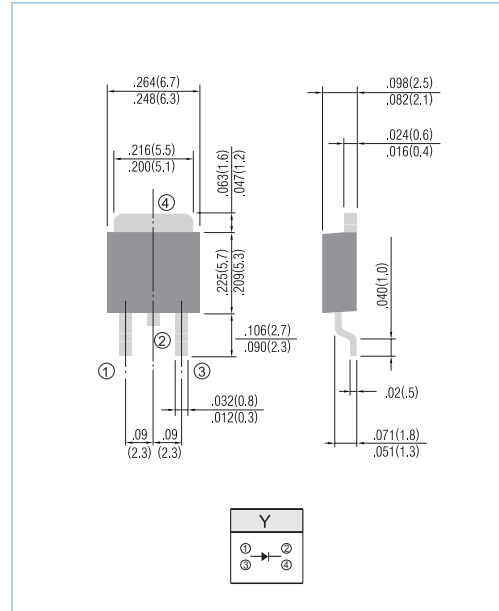
TO-252 Unit: inch ( mm )

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Low power loss, High efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Lead free in comply with EU RoHS 2002/95/EC directives.

### MECHANICAL DATA

- Case: TO-252 molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marking
- Weight: 0.0104 ounces, 0.297 grams.



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

| PARAMETER                                                                                        | SYMBOL                             | BD340YS     | BD345YS | BD350YS | BD360YS | BD380YS     | BD390YS | BD3100YS | BD3150YS | BD3200YS | UNITS           |
|--------------------------------------------------------------------------------------------------|------------------------------------|-------------|---------|---------|---------|-------------|---------|----------|----------|----------|-----------------|
| Maximum Recurrent Peak Reverse Voltage                                                           | $V_{RRM}$                          | 40          | 45      | 50      | 60      | 80          | 90      | 100      | 150      | 200      | V               |
| Maximum RMS Voltage                                                                              | $V_{RMS}$                          | 28          | 31.5    | 35      | 42      | 56          | 63      | 70       | 105      | 140      | V               |
| Maximum DC Blocking Voltage                                                                      | $V_{DC}$                           | 40          | 45      | 50      | 60      | 80          | 90      | 100      | 150      | 200      | V               |
| Maximum Average Forward Current (See Figure 1)                                                   | $I_{F(AV)}$                        | 3.0         |         |         |         |             |         |          |          |          | A               |
| Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method) | $I_{FSM}$                          | 75          |         |         |         |             |         |          |          |          | A               |
| Maximum Forward Voltage at 3.0A ( Note 1)                                                        | $V_F$                              | 0.70        | 0.74    |         | 0.80    |             |         | 0.90     |          | V        |                 |
| Maximum DC Reverse Current $T_J=25^{\circ}C$ at Rated DC Blocking Voltage $T_J=100^{\circ}C$     | $I_R$                              | 0.05<br>20  |         |         |         |             |         |          |          |          | mA              |
| Typical Thermal Resistance ( Note 2)                                                             | $R_{\theta JL}$<br>$R_{\theta JA}$ | 20<br>75    |         |         |         |             |         |          |          |          | $^{\circ}C / W$ |
| Operating Junction and Storage Temperature Range                                                 | $T_J, T_{STG}$                     | -55 to +150 |         |         |         | -65 to +175 |         |          |          |          | $^{\circ}C$     |

### NOTES:

1. Pulse Test with PW =300μsec, 1% Duty Cycle.
2. Mounted on P.C. Board with 8.0mm<sup>2</sup> (.013mm thick) copper pad areas.



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## RATING AND CHARACTERISTIC CURVES

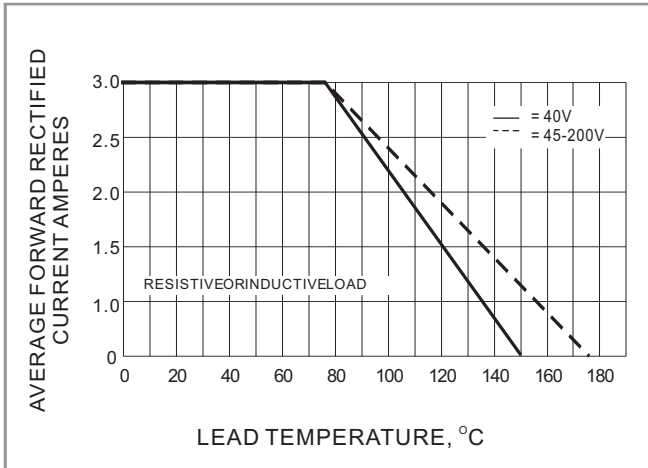


Fig.1- FORWARD CURRENT DERATING CURVE

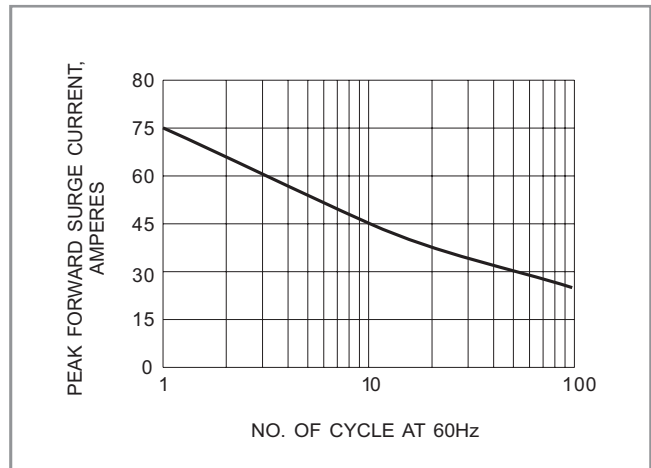


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

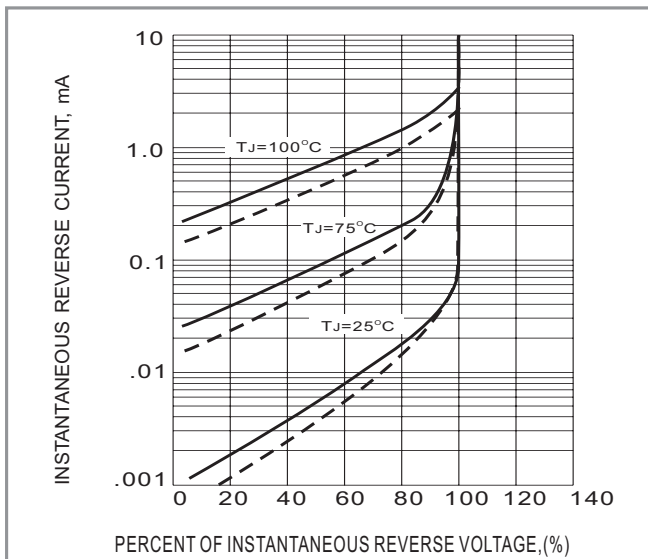


Fig.3- TYPICAL REVERSE CHARACTERISTICS

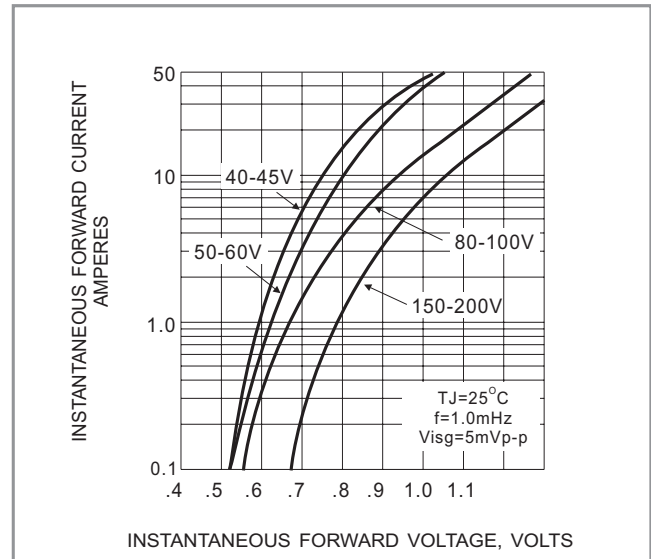
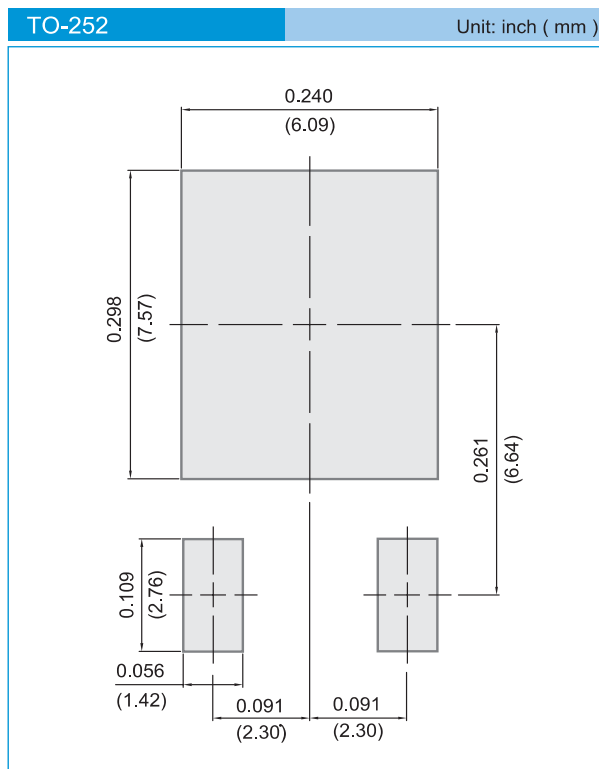


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information  
T/R - 3K per 13" plastic Reel

## LEGAL STATEMENT

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