



# BD840YT~BD8200YT

## THROUGH HOLE MOUNT SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 40 to 200 Volts **CURRENT** 8 Ampere

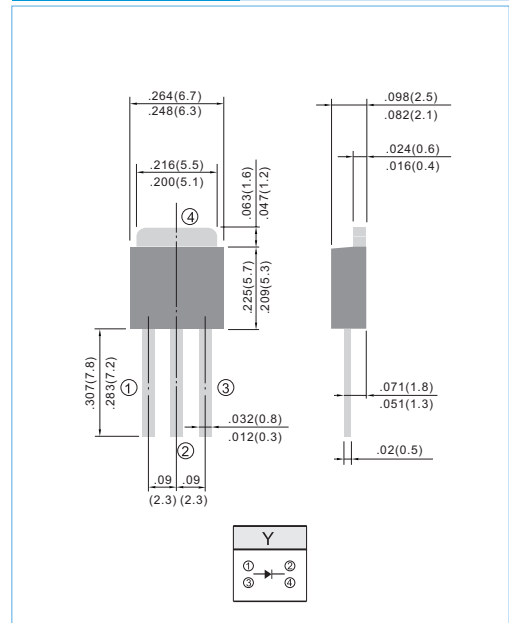
TO-251AB Unit : inch (mm)

### 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
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: TO-251AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marking
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.0104 ounces, 0.297grams.



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| PARAMETER  | SYMBOL          | BD840YT     | BD845YT | BD850YT | BD860YT | BD880YT     | BD890YT | BD8100YT | BD8150YT | BD8200YT | 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)   | $I_{F(AV)}$     | 8           |         |         |         |             |         |          |          |          | A               |
| Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method) | $I_{FSM}$       | 85          |         |         |         |             |         |          |          |          | A               |
| Maximum Forward Voltage at 8.0A  | $V_F$           | 0.70        |         | 0.75    |         | 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        |         |          |          |          | mA              |
|  |                 |             |         |         |         | 20          |         |          |          |          |                 |
| Typical Thermal Resistance   | $R_{\theta JC}$ |             |         |         |         | 5           |         |          |          |          | $^{\circ}C / W$ |
| Operating Junction and Storage Temperature Range   | $T_J, T_{STG}$  | -55 to +150 |         |         |         | -65 to +175 |         |          |          |          | $^{\circ}C$     |



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## RATING AND CHARACTERISTIC CURVES

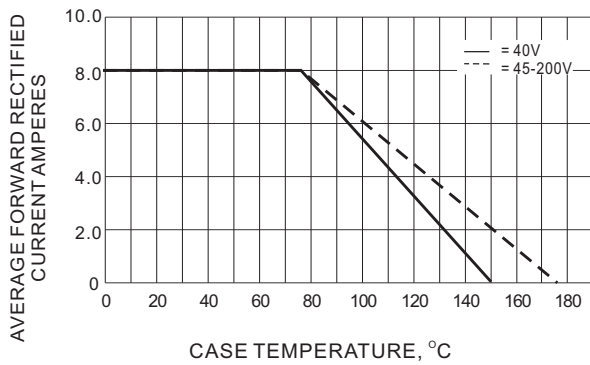


Fig.1- FORWARD CURRENT DERATING CURVE

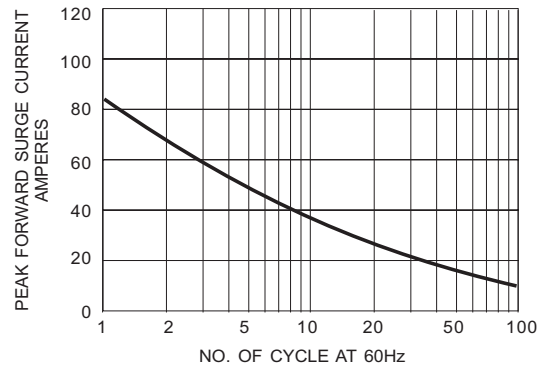


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

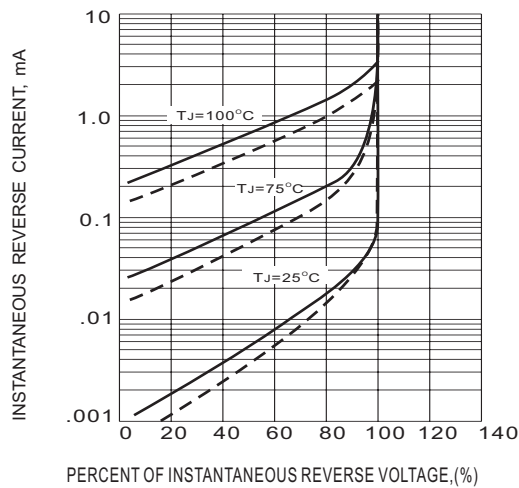


Fig.3- TYPICAL REVERSE CHARACTERISTICS

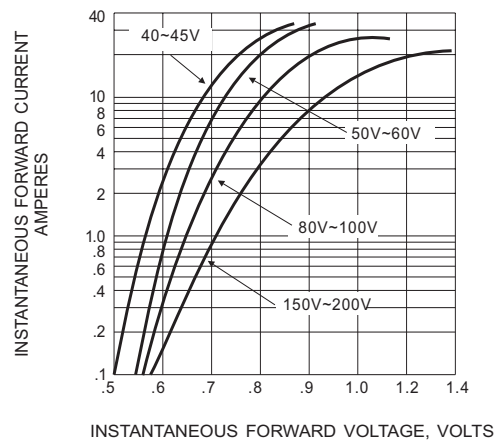


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS