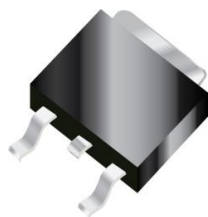




# EBRT20E150CD2



## Excellent Schottky Barrier Rectifiers



D2-PAK

### Primary Characteristics

|           |                                     |            |
|-----------|-------------------------------------|------------|
| $I_F$     | 20                                  | A          |
| $V_{RRM}$ | 150                                 | V          |
| $I_{FSM}$ | 150                                 | A          |
| $V_F$     | 0.62 ( $I_F=5A$ $T_J=125^\circ C$ ) | V          |
| $T_J$ max | 150                                 | $^\circ C$ |

### Features

- Low Forward Voltage Drop
- Excellent High Temperature Stability
- Excellent Barrier Rectifier Technology
- Soft, Fast Switching Capability

### Mechanical Data

- Case: D2-PAK
- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208
- Weight: 1.43 grams (approximate)

### Ordering Information

| Part No.        | Remark       | Package | Packing    |
|-----------------|--------------|---------|------------|
| EBRT20E150CD2   | General      | D2-PAK  | 800 / Reel |
| EBRT20E150CD2-H | Halogen Free |         |            |

### Maximum Ratings ( $T_A=25^\circ C$ unless otherwise noted)

| PARAMETER                                                                                                                                             | SYMBOL          | EBRT20E150CD2                                    | UNIT         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------------------------------|--------------|
| Maximum repetitive peak reverse voltage                                                                                                               | $V_{RRM}$       | 150                                              | V            |
| Maximum RMS voltage                                                                                                                                   | $V_{RMS}$       | 105                                              | V            |
| Maximum DC blocking voltage                                                                                                                           | $V_{DC}$        | 150                                              | V            |
| Maximum average forward rectified current<br>(Total)<br>(Per Leg)                                                                                     | $I_F$           | 20<br>10                                         | A            |
| Peak forward surge current, 8.3ms single half<br>sine-wave superimposed on rated load                                                                 | $I_{FSM}$       | 150                                              | A            |
| Maximum Instantaneous Forward Voltage<br>$I_F=5A$ @ $25^\circ C$<br>$I_F=5A$ @ $125^\circ C$<br>$I_F=10A$ @ $25^\circ C$<br>$I_F=10A$ @ $125^\circ C$ | $V_F$           | 0.77 Typ.<br>0.62 Typ.<br>0.83 Max.<br>0.75 Max. | V            |
| Maximum DC Reverse Current @ $T_A=25^\circ C$<br>at Rated DC Blocking Voltage @ $T_A=125^\circ C$                                                     | $I_R$           | 0.2<br>15                                        | mA           |
| Typical Junction Capacitance(NOTE1)                                                                                                                   | $C_j$           | 720                                              | pF           |
| Typical Thermal Resistance                                                                                                                            | $R_{\theta JC}$ | 3                                                | $^\circ C/W$ |
| Operating Temperature Range                                                                                                                           | $T_J$           | -55 to +150                                      | $^\circ C$   |
| Storage Temperature Range                                                                                                                             | $T_{STG}$       | -55 to +175                                      | $^\circ C$   |
| Marking Code                                                                                                                                          |                 | T20E150CD2 · 20E150CD2                           |              |

### NOTES:

1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC



## Excellent Schottky Barrier Rectifiers

### Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

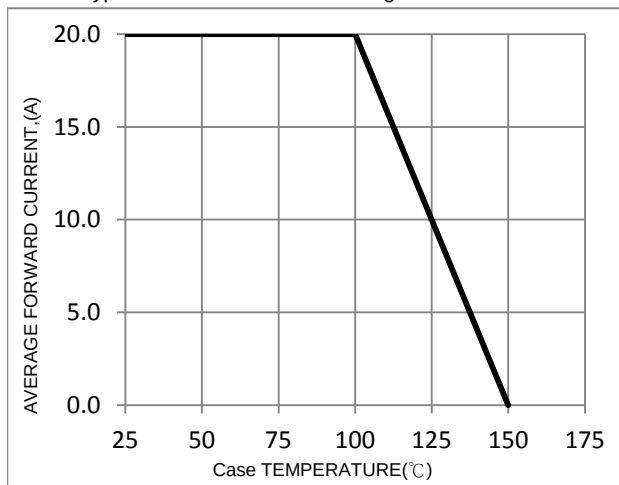


FIG. 2-Typical Forward Characteristics

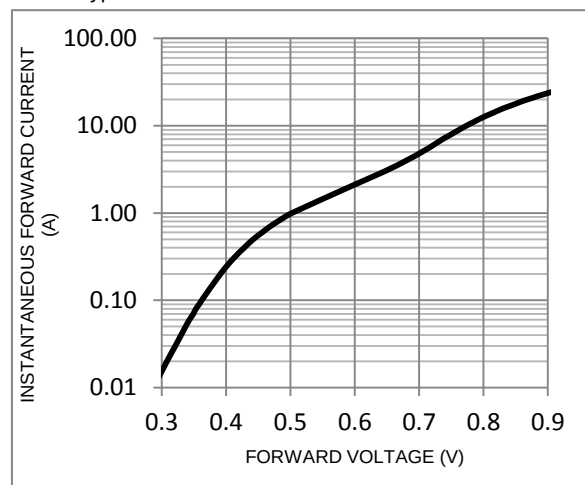


FIG. 3-Maximum Non-Repetitive Forward Surge Current

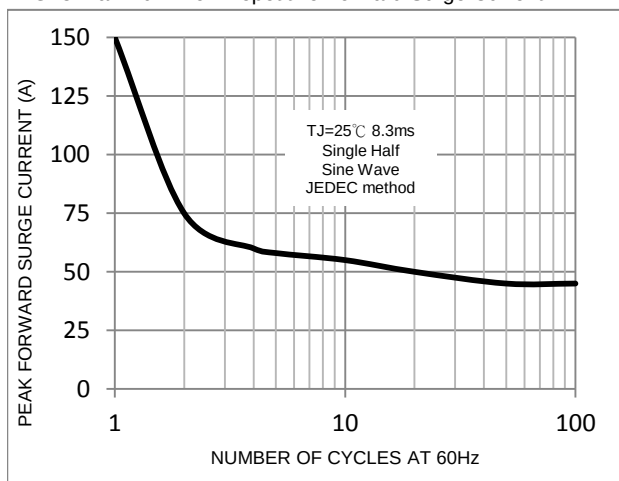


FIG. 4-Typical Reverse Characteristics

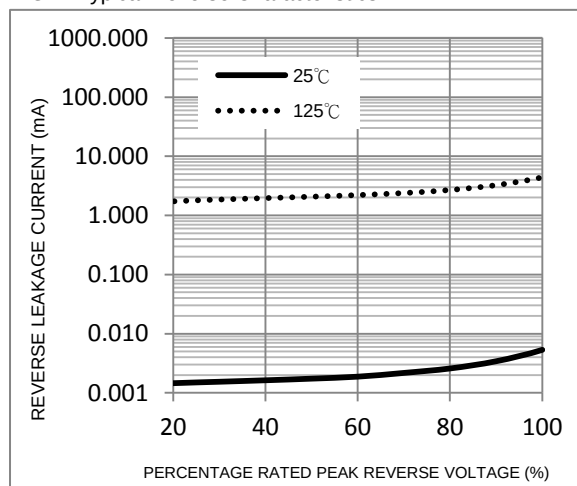
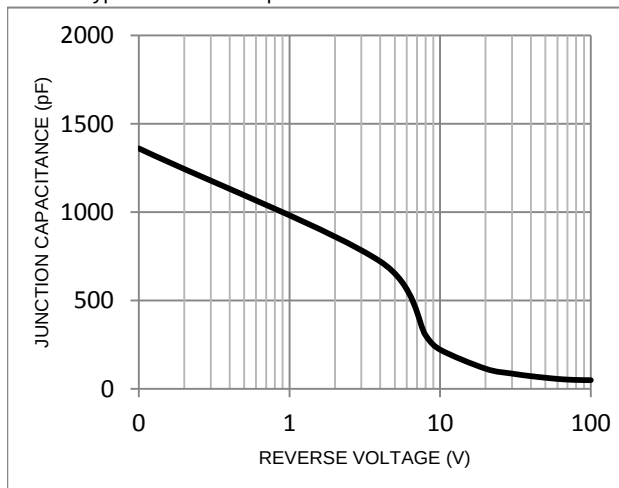


FIG. 5-Typical Junction Capacitance



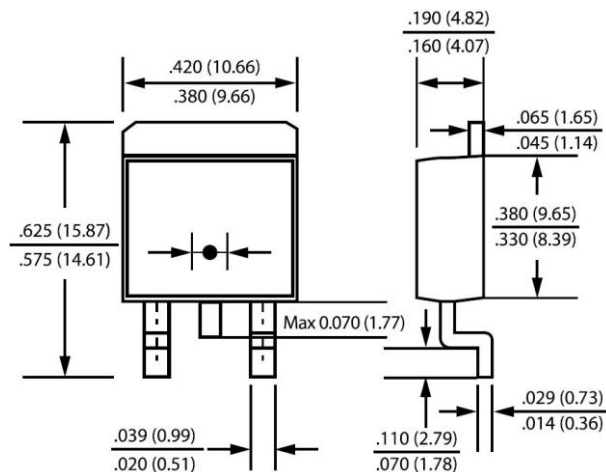


# EBRT20E150CD2



## Excellent Schottky Barrier Rectifiers

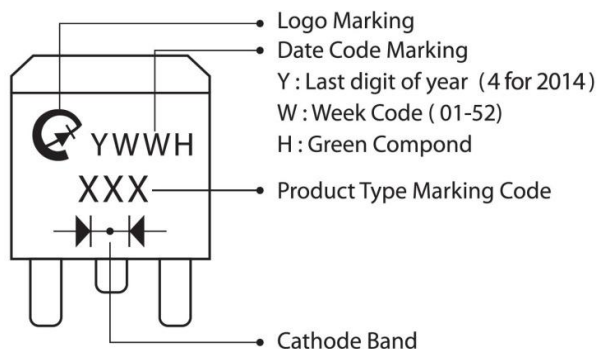
### Package Outline Dimensions



### D2-PAK

Dimensions in inches and (millimeters)

### Marking Information



### Suggested Pad Layout

| Dimension | Outline | D2PAK (mm) |
|-----------|---------|------------|
| A         |         | 5.08       |
| B         |         | 1.10       |
| C         |         | 10.80      |
| D         |         | 8.30       |
| E         |         | 3.50       |
| F         |         | 16.90      |

