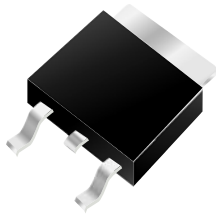




# EBRT30L60CD2



## Excellent Schottky Barrier Rectifiers



D2-PAK

| Primary Characteristics |     |    |
|-------------------------|-----|----|
| $I_F$                   | 30  | A  |
| $V_{RRM}$               | 60  | V  |
| $I_{FSM}$               | 150 | A  |
| $V_F$                   | 0.5 | V  |
| $T_J \text{ max}$       | 150 | °C |

| Features  |
|---|
| <ul style="list-style-type: none"> <li>• Low Forward Voltage Drop</li> <li>• Excellent High Temperature Stability</li> <li>• Excellent Barrier Rectifier Technology</li> <li>• Soft, Fast Switching Capability</li> </ul> |

| Mechanical Data  |
|--|
| <ul style="list-style-type: none"> <li>• Case: D2-PAK</li> <li>• Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0</li> <li>• Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208</li> <li>• Weight: 1.43 grams (approximate)</li> </ul> |

| Ordering Information |              |         |            |
|----------------------|--------------|---------|------------|
| Part No.             | Remark       | Package | Packing    |
| EBRT30L60CD2         | General      | D2-PAK  | 800 / Reel |
| EBRT30L60CD2-H       | Halogen Free |         |            |

| Maximum Ratings (TA=25°C unless otherwise noted)                                   |                 |                        |      |
|--|-----------------|------------------------|------|
| PARAMETER  | SYMBOL          | EBRT30L60CD2           | UNIT |
| Maximum repetitive peak reverse voltage  | $V_{RRM}$       | 60                     | V    |
| Maximum RMS voltage  | $V_{RMS}$       | 42                     | V    |
| Maximum DC blocking voltage  | $V_{DC}$        | 60                     | V    |
| Maximum average forward rectified current (Total)                                  | $I_F$           | 30                     | A    |
| (Per Leg)  |                 | 15                     |      |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | $I_{FSM}$       | 150                    | A    |
| Maximum Instantaneous Forward Voltage<br>IF=3A @ 25°C<br>IF=15A @ 25°C             | $V_F$           | 0.35 Typ.<br>0.50 Max. | V    |
| Maximum DC Reverse Current @ TA=25°C<br>at Rated DC Blocking Voltage @ TA=125°C    | $I_R$           | 0.5<br>80              | mA   |
| Typical Junction Capacitance(NOTE1)  | $C_j$           | 1520                   | pF   |
| Typical Thermal Resistance   | $R_{\theta JC}$ | 3                      | °C/W |
| Operating Temperature Range  | $T_J$           | -55 to +150            | °C   |
| Storage Temperature Range  | $T_{STG}$       | -55 to +175            | °C   |
| Marking Code   |                 | T30L60CD2、30L60CD2     |      |

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

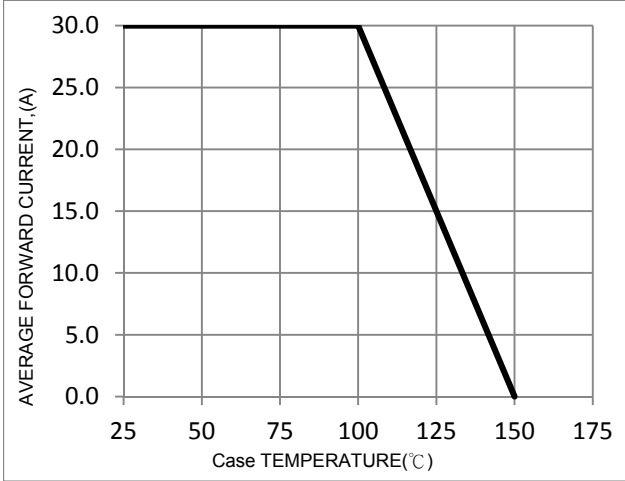


FIG. 2-Typical Forward Characteristics

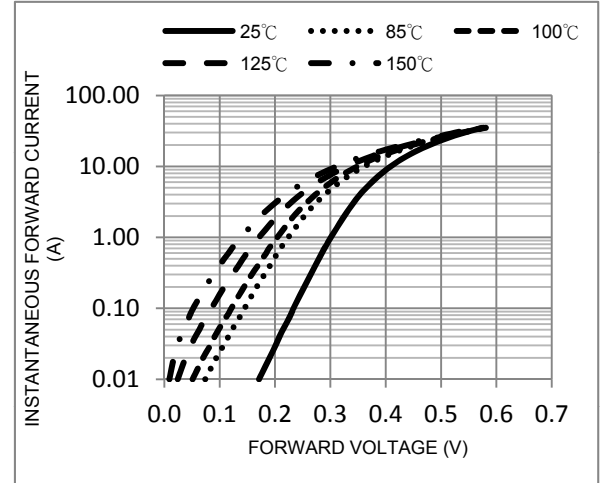


FIG. 3-Maximum Non-Repetitive Forward Surge Current

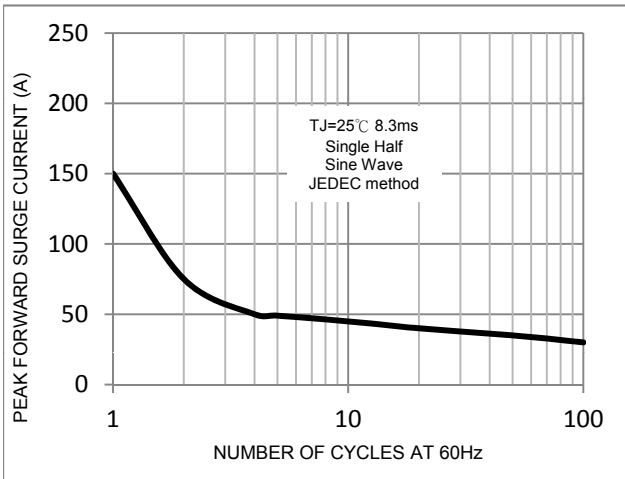


FIG. 4-Typical Reverse Characteristics

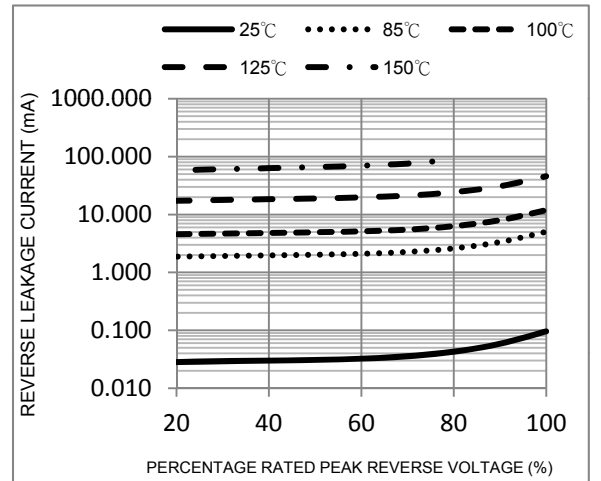
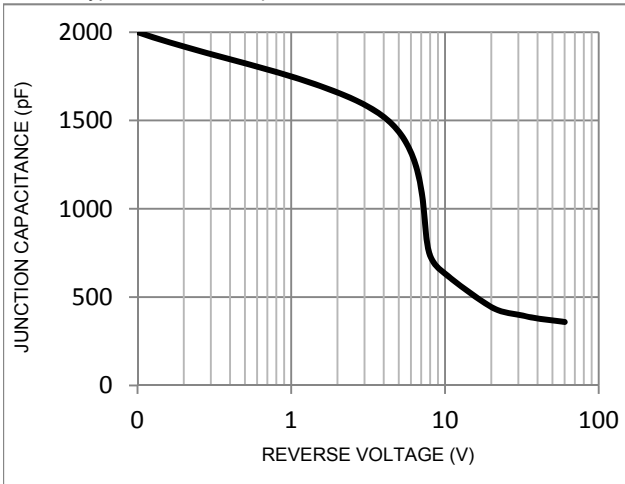
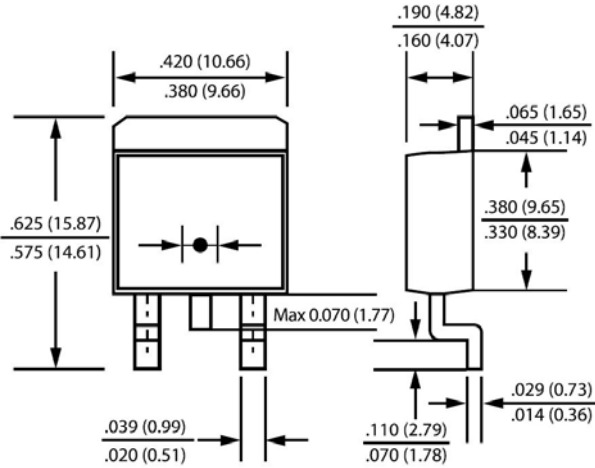


FIG. 5-Typical Junction Capacitance





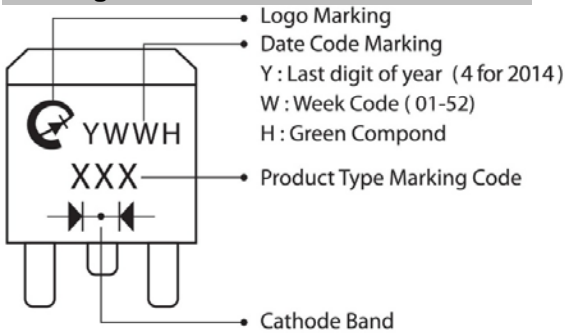
### Package Outline Dimensions



### D2-PAK

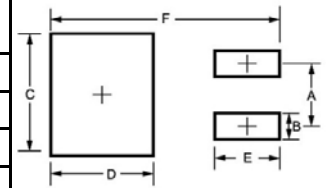
Dimensions in inches and (millimeters)

### 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      |



### Tap & Reel Specification

| ITEM                   | SYMBOL | D2PAK (mm) |
|------------------------|--------|------------|
| Carrier width          | A      | 10.7±0.1   |
| Carrier length         | B      | 16.3±0.1   |
| Carrier depth          | C      | 5±0.1      |
| Sprocket hole          | d      | 1.55±0.05  |
| Reel outside diameter  | D      | 330±2      |
| Feed hole diameter     | D0     | 13.5±1     |
| Reel inner diameter    | D1     | 100(min)   |
| Sprocket hole position | E      | 1.75±0.1   |
| Punch hole position    | F      | 11.5±0.1   |
| Sprocket hole pitch    | P      | 16±0.1     |
| Sprocket hole pitch    | Po     | 4±0.1      |
| Embossment center      | P1     | 2±0.1      |
| Overall tape thickness | T      | 0.3±0.05   |
| Tape width             | W      | 24±0.3     |
| Reel width             | W2     | -          |
| Reel width             | W1     | 24.2(max)  |

