

Excellent Schottky Barrier Rectifiers

D2-PAK

Features

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

Primary Characteristics

| I _F | 30 | А |
|--------------------|------|----|
| V _{RRM} | 100 | V |
| I _{FSM} | 250 | А |
| V _F | 0.65 | V |
| T _J max | 150 | °C |

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

| ordering information | | | |
|----------------------|--------------|---------|------------|
| Part No. | Remark | Package | Packing |
| EBRT30E100CD2 | General | D2-PAK | 800 / Reel |
| EBRT30E100CD2-H | Halogen Free | DZ-FAR | 0007 1100 |

Maximum Ratings (TA=25°C unless otherwise noted)

| Parameter | Symbol | EBRT30E100CD2 | Unit |
|--|------------------|------------------------|------|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 100 | V |
| Maximum RMS Voltage | V _{RMS} | 70 | V |
| Maximum DC Blocking Voltage | V _{DC} | 100 | V |
| Maximum Average Forward Rectified Current (Total) (Per Leg) | I _F | 30 15 | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load | I _{FSM} | 250 | А |
| Maximum Instantaneous Forward Voltage IF=5A @ 25°C IF=15A @ 25°C | V _F | 0.47 Тур. 0.65 Мах. | V |
| Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=125°C | I _R | 0.2 20 | mA |
| Typical Junction Capacitance (NOTE1) | Cj | 1400 | pF |
| Typical Thermal Resistance | R _{eJC} | 3 | °C/W |
| Operating Temperature Range | TJ | -55 to +150 | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | °C |
| Marking Code | | T30E100CD2 \ 30E100CD2 | |

NOTES :

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



Pb RoHS **Excellent Schottky Barrier Rectifiers**

Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

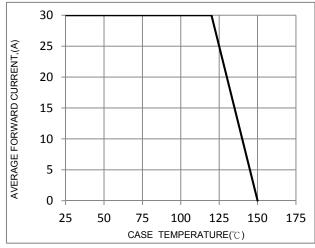


FIG. 3-Maximum Non-Repetitive Forward Surge Current

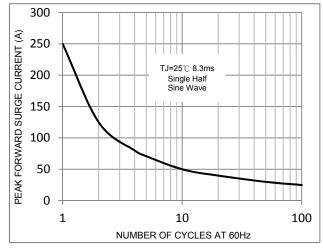


FIG. 5-Typical Junction Capacitance

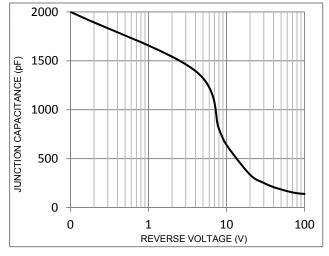


FIG. 2-Typical Forward Characteristics 100.00 INSTANTANEOUS FORWARD CURRENT (A) 10.00 1.00 0.10

0.4

0.5

FORWARD VOLTAGE (V)

0.6

0.7

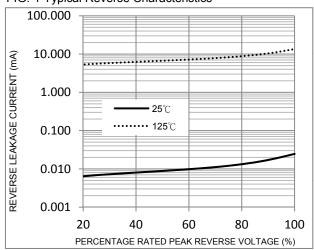
0.8

FIG. 4-Typical Reverse Characteristics

0.3

0.01

0.2



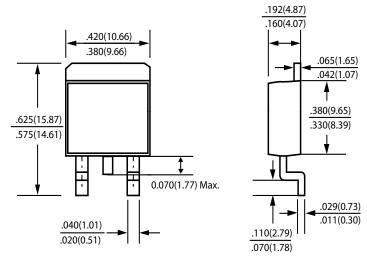




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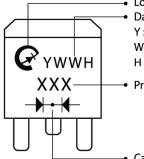
Package Outline Dimensions



D2-PAK

Dimensions in inches and (millimeters)

Marking Information



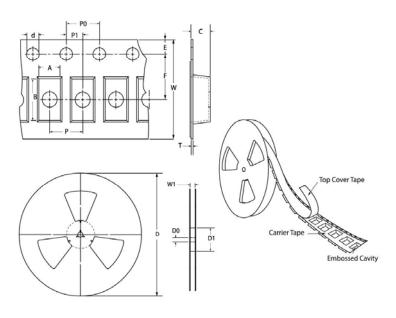
- Logo Marking
 Date Code Marking
 Y : Last digit of year (4 for 2014)
 W : Week Code (01-52)
- H : Green Compound
- Product Type Marking Code

| Suggested Pad Layout | | | | |
|----------------------|---------|--------|------------|--|
| | Outline | D2-PAK | | |
| Dimension | | (mm) | | |
| A | | 5.08 | ↓ F | |
| В | | 1.10 | | |
| С | | 10.80 | | |
| D | | 8.30 | | |
| E | | 3.50 | ╧╘╼┤ | |
| F | | 16.90 | | |

Cathode Band

Tape & Reel Specification

| rape a ricer opeometation | | | |
|---------------------------|--------|-----------|--|
| ltem | Symbol | D2-PAK | |
| item | Gymbol | (mm) | |
| Carrier width | А | 10.8±0.1 | |
| Carrier length | В | 16.2±0.2 | |
| Carrier depth | С | 5.2±0.3 | |
| Sprocket hole | d | 1.55±0.05 | |
| Reel outside diameter | D | 330±2 | |
| Feed hole diameter | D0 | 13.5±1 | |
| Reel inner diameter | D1 | 50(min) | |
| Sprocket hole position | E | 1.75±0.1 | |
| Punch hole position | F | 11.5±0.1 | |
| Sprocket hole pitch | Р | 16.0±0.1 | |
| Sprocket hole pitch | P0 | 4.0±0.1 | |
| Embossment center | P1 | 2.0±0.1 | |
| Overall tape thickness | Т | 0.305±0.1 | |
| Tape width | W | 24±0.3 | |
| Reel width | W1 | 24.3(Max) | |





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