



EBRT5L200A



Excellent Schottky Barrier Rectifiers



DO-214AC(SMA)

| Primary Characteristics | | |
|-------------------------|------|----|
| I_F | 5 | A |
| V_{RRM} | 200 | V |
| I_{FSM} | 80 | A |
| V_F | 0.93 | V |
| $T_J \text{ max}$ | 150 | °C |

| Features |
|---|
| <ul style="list-style-type: none"> • High current capability • High surge current capability • Low reverse current • Component in accordance to RoHS 2002/95/EC |

| Mechanical Data |
|---|
| • Cases:DO-214AC(SMA) |
| • Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 |
| • Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208 |
| • Polarity: Cathode Band |
| • Weight: 0.062 grams (approximate) |

| Ordering Information | | | |
|----------------------|--------------------|---------|--------------------|
| Part No. | Remark | Package | Packing |
| EBRT5L200A | General | SMA | 5000 / Tape & Reel |
| EBRT5L200A-H | Halogen Free | | |
| EBRT5L200A-Q | AEC-Q101 qualified | | |

| Maximum Ratings (TA=25°C unless otherwise noted) | | | |
|--|-----------------|------------------------|------|
| PARAMETER | SYMBOL | EBRT5L200A | UNIT |
| Maximum repetitive peak reverse voltage | V_{RRM} | 200 | V |
| Maximum RMS voltage | V_{RMS} | 140 | V |
| Maximum DC blocking voltage | V_{DC} | 200 | V |
| Maximum average forward rectified current | I_F | 5 | A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 80 | A |
| Maximum Instantaneous Forward Voltage IF=2A @ 25°C IF=5A @ 25°C | V_F | 0.74 Typ. 0.93 Max. | V |
| Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=100°C | I_R | 0.2 5 | mA |
| Typical Junction Capacitance(NOTE1) | C_j | 290 | pF |
| Typical Thermal Resistance | $R_{\theta JC}$ | 15 | °C/W |
| Operating Temperature Range | T_J | -55 to +150 | °C |
| Storage Temperature Range | T_{STG} | -55 to +150 | °C |
| Marking Code | | T5L200A | |

NOTES:

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



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Rating and Characteristics Curves

FIG. 1-Typical Forward Current Derating Curve

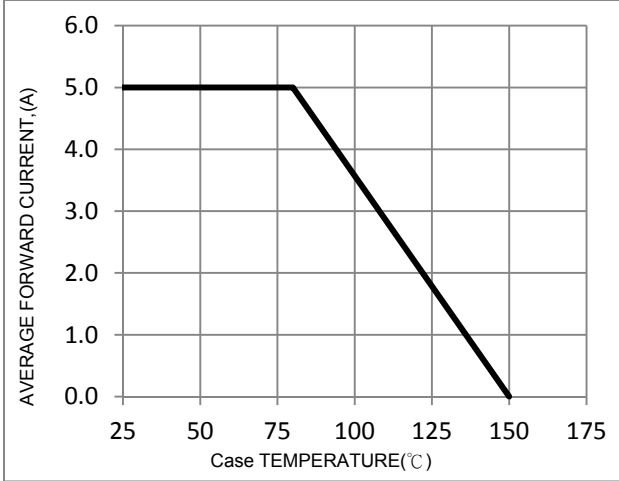


FIG. 2-Typical Forward Characteristics

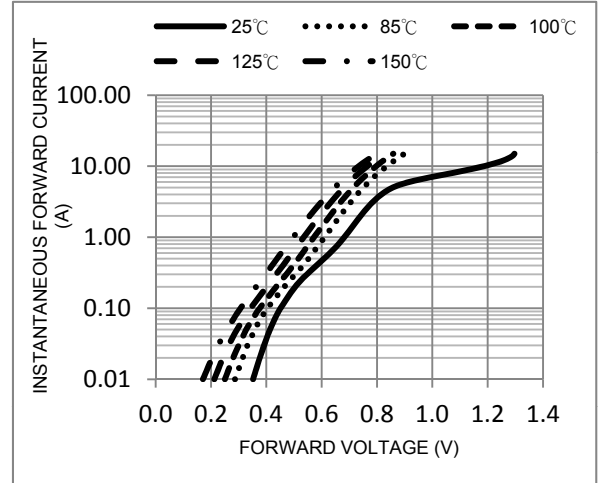


FIG. 3-Maximum Non-Repetitive Forward Surge Current

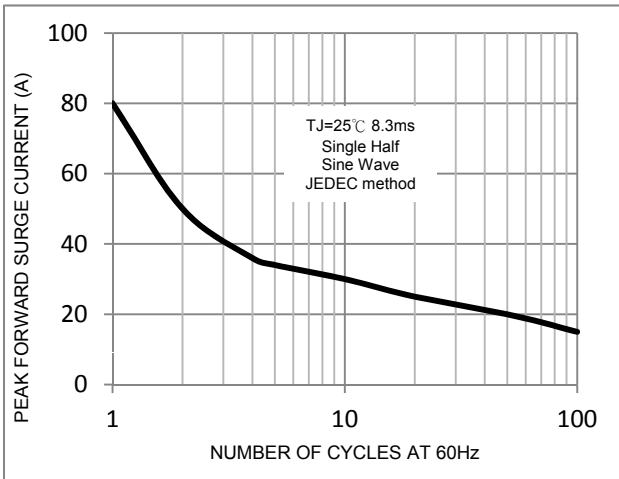


FIG. 4-Typical Reverse Characteristics

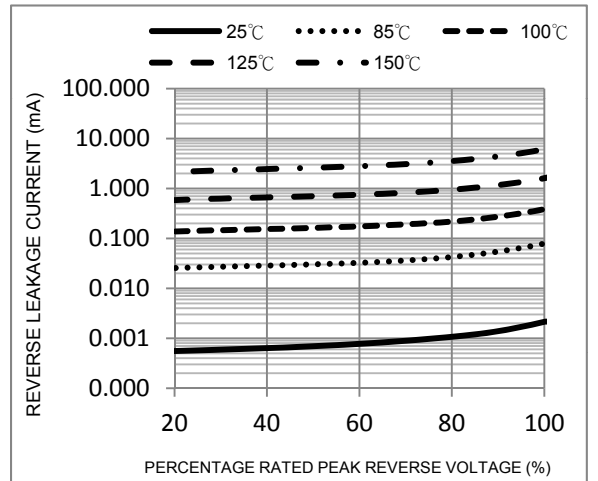
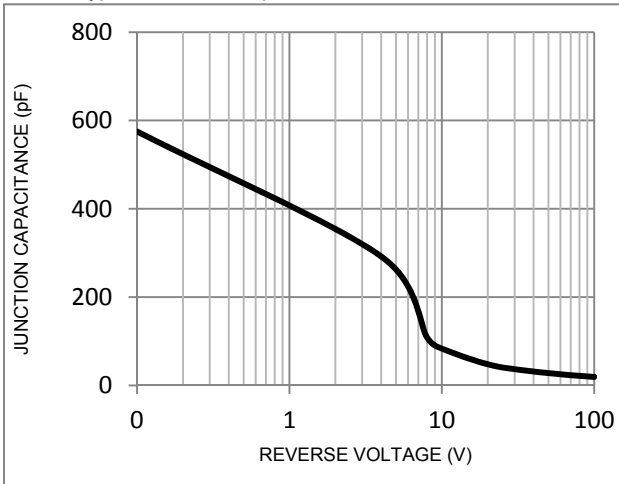


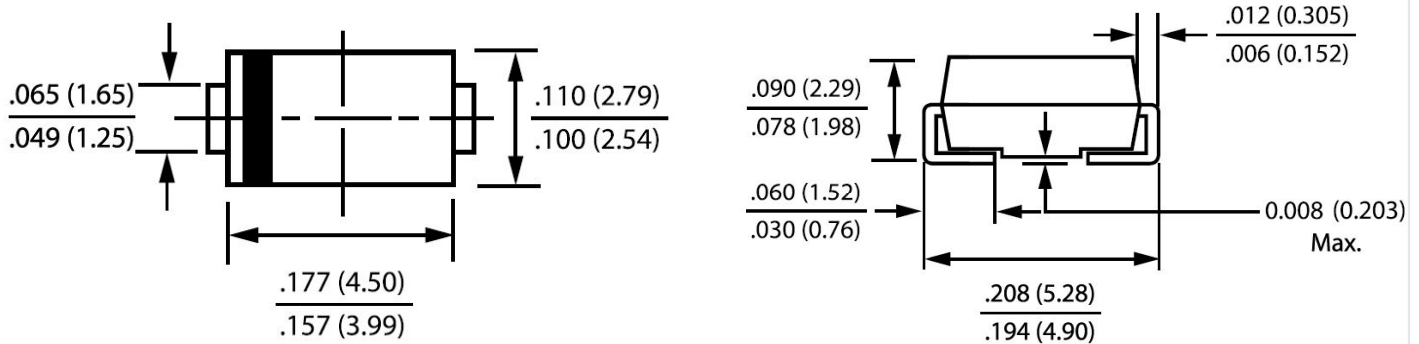
FIG. 5-Typical Junction Capacitance





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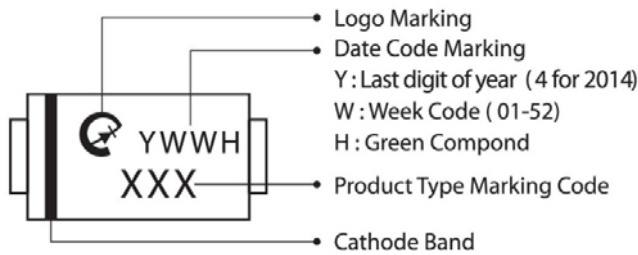
Package Outline Dimensions



DO-214AC(SMA)

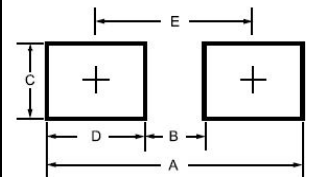
Dimensions in inches and (millimeters)

Marking Information



Suggested Pad Layout

| Dimension | Outline | SMA (DO-214AC) |
|-----------|---------|----------------|
| A | | 6.50 |
| B | | 1.50 |
| C | | 1.70 |
| D | | 2.50 |
| E | | 4.00 |



Tape & Reel Specification

| ITEM | SYMBOL | SMA(mm) DO-214AC |
|------------------------|--------|---------------------|
| Carrier width | A | 2.9(max) |
| Carrier length | B | 5.9(max) |
| Carrier depth | C | 2.66(max) |
| Sprocket hole | d | 1.50±0.1 |
| Reel outside diameter | D | 330±2.0 |
| 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 | 5.5±0.05 |
| Sprocket hole pitch | P | 4.0±0.1 |
| Sprocket hole pitch | Po | 4.0±0.1 |
| Embossment center | P1 | 2.0±0.05 |
| Overall tape thickness | T | 0.6 (max) |
| Tape width | W | 12.0±0.3 |
| Reel width | W2 | 18.4 (max) |
| Reel width | W1 | 14.4 (max) |

