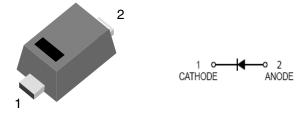


Schottky Barrier Diode in SOD-523

Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Reverse Recovery Time
- Low Reverse Capacitance



Mechanical Data

- Case: SOD-523 (plastic package). Lead free; RoHS compliant
- Molding Compound Flammability Rating: UL 94 V-0
- **Terminals:** High temperature soldering guaranteed: 260 °C/10 sec. at terminals

Applications

- Low current rectification
- High efficiency DC-to-DC conversion
- Switch Mode Power Supply (SMPS)
- Reverse polarity protection
- Low power consumption applications

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

| Parameter | Symbol | Limit | Unit |
|---|------------------|----------|------|
| DC reverse voltage | V _R | 30 | V |
| Mean rectifying current | I _{FM} | 200 | mA |
| Non-repetitive Peak forward surge current @ t=8.3ms | I _{FSM} | 600 | mA |
| Power dissipation | PD | 150 | mW |
| Thermal Resistance Junction to Ambient | RθJA | 667 | °C/W |
| Junction temperature | Tj | 125 | ℃ |
| Storage temperature | Tstg | -55~+150 | ℃ |

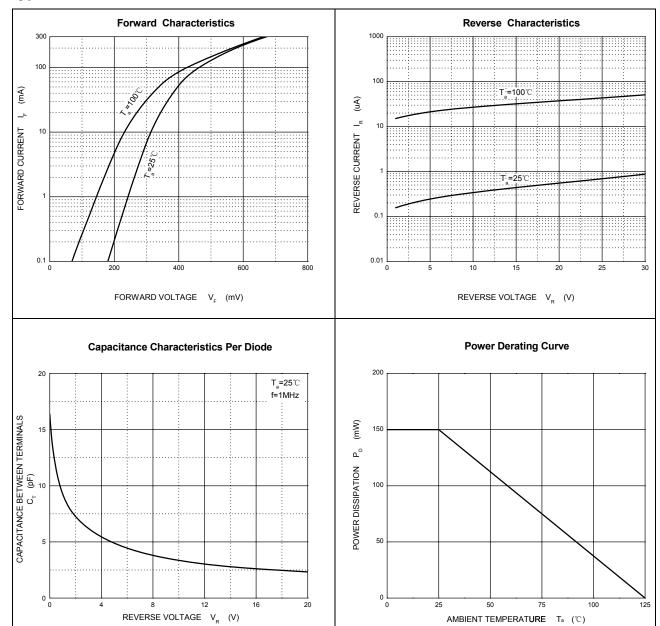
Electrical Characteristics

(T_A = 25 °C unless otherwise specified)

| (VA == c ================================ | | | | | | |
|---|-----------------|-----|-----|------|------|------------|
| Parameter | Symbol | Min | Тур | Max | Unit | Conditions |
| Enguard voltage | V _{F1} | | | 0.32 | V | IF=1mA |
| Forward voltage | V _{F2} | | | 0.4 | V | IF=10mA |
| Reverse current | I _R | | | 2 | μA | VR=25V |

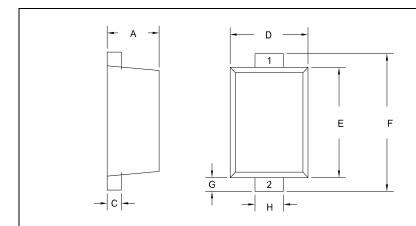


Typical Characteristics ($T_{amb} = 25 \, ^{\circ}\text{C}$ unless otherwise specified)





Package Dimensions



| Dim | millmeters | | | |
|-------|------------|------|--|--|
| Dilli | min | max | | |
| Α | 0.50 | 0.70 | | |
| С | 0.07 | 0.20 | | |
| D | 0.70 | 0.90 | | |
| Е | 1.10 | 1.30 | | |
| F | 1.50 | 1.70 | | |
| G | 0.15 | 0.25 | | |
| Н | 0.25 | 0.35 | | |

Ordering information

| Order code | Package | Packaging option | Base quantity | Packaging specification |
|------------|---------|------------------|----------------|-------------------------|
| BAT54WT | SOD-523 | Tape and reel | 8000pcs / reel | EIA STD RS-481 |

Revision history

| Date | Revision | Changes |
|-------------|----------|-----------------|
| 23-May-2016 | 1.0 | Initial release |



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