

GSDSBAT42/43XV2

Schottky Barrier Diodes

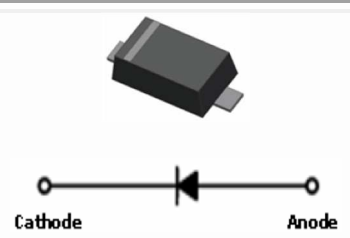
Product Description

Schottky Barrier Diodes 200mW / 30V

Features

- Low Forward Voltage Drop
- Extremely Small SOD-523 Package
- Flat Lead SOD-523 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicate Cathode

Marking Information

| Part Number | Package | Part Marking | Equivalent Circuit diagram |
|---------------|---------|--------------|---|
| GSDSBAT42XV2F | SOD-523 | 6B |  |
| GSDSBAT43XV2F | SOD-523 | 7B | |

Ordering Information



| Part Number | Package | Quantity |
|---------------|---------|----------|
| GSDSBAT42XV2F | SOD-523 | 3000 PCS |
| GSDSBAT43XV2F | SOD-523 | |

Absolute Maximum Ratings

(T_A=25°C Unless otherwise noted)

| Symbol | Parameter | Value | Unit |
|--------------------|-----------------------------------|-------------|------|
| P _D | Power Dissipation | 200 | mW |
| V _{RRM} | Repetitive Peak Reverse Voltage | 30 | V |
| V _R | Maximum DC Blocking Voltage | 30 | V |
| T _J | Operating Junction Temperature | +125 | °C |
| T _{STG} | Storage Temperature Range | -65 to +125 | °C |
| I _{F(AV)} | Average Forward Rectified Current | 200 | mA |
| I _{FSM} | Forward current surge peak | 4 | A |

These ratings are limiting values above which the serviceability of the diode may be impaired.

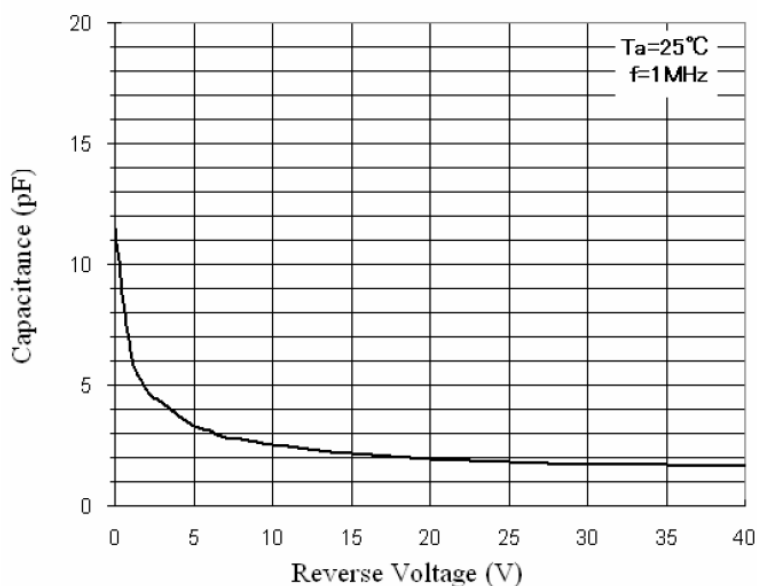
Electrical Characteristics

(T_A=25°C Unless otherwise noted)

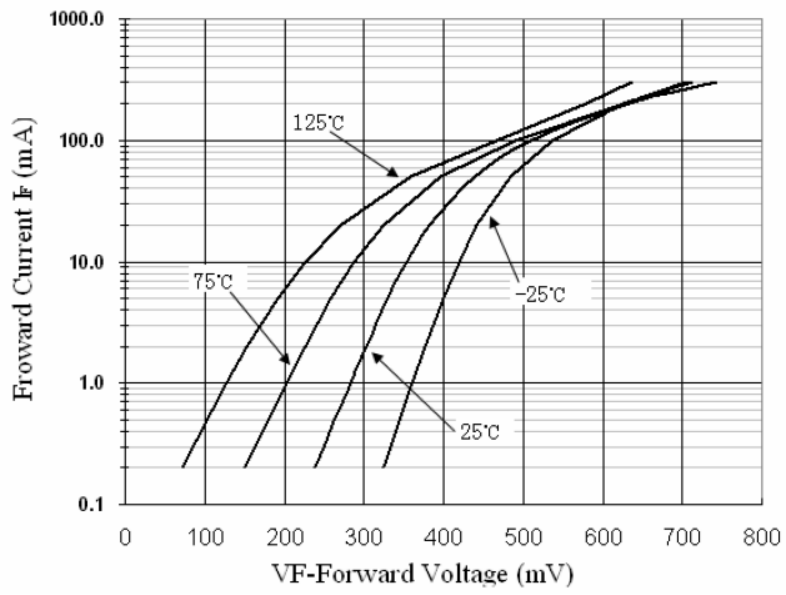
| Symbol | Parameter | Test Condition | Min | Max | Unit |
|-----------------|--------------------------------------|--|------------|------|------|
| B _V | Breakdown Voltage | I _R = 100μA | 30 | - | V |
| I _R | Reverse Current | V _R = 25V | - | 500 | nA |
| V _F | Forward Voltage | GSDSBAT42XV2 I _F = 10mA | - | 0.40 | V |
| | | I _F = 50mA | - | 0.65 | |
| | GSDSBAT43XV2 I _F = 2mA | 0.26 | 0.33 | | |
| | I _F = 15mA | - | 0.45 | | |
| | GSDSBAT42XV2, GSDSBAT43XV2 | I _F = 200mA | - | 1.0 | |
| T _{RR} | Reverse Recovery Time | I _F = I _R = 10mA R _L = 100Ω T _{RR} = 1mA | 5(Typical) | | nS |
| C | Capacitance | V _R = 1V, f = 1MHZ | 7(Typical) | | pF |

Typical Characteristics

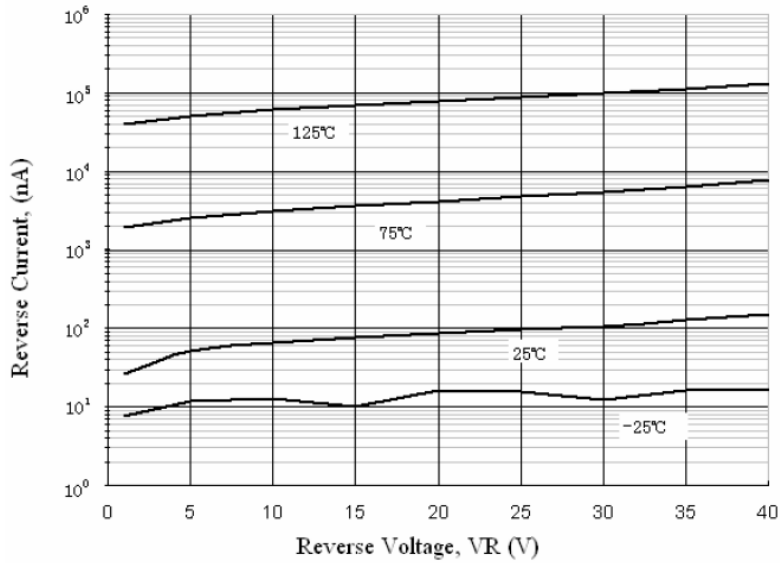
Total Capacitance



Forward Voltage vs Ambient Temperature

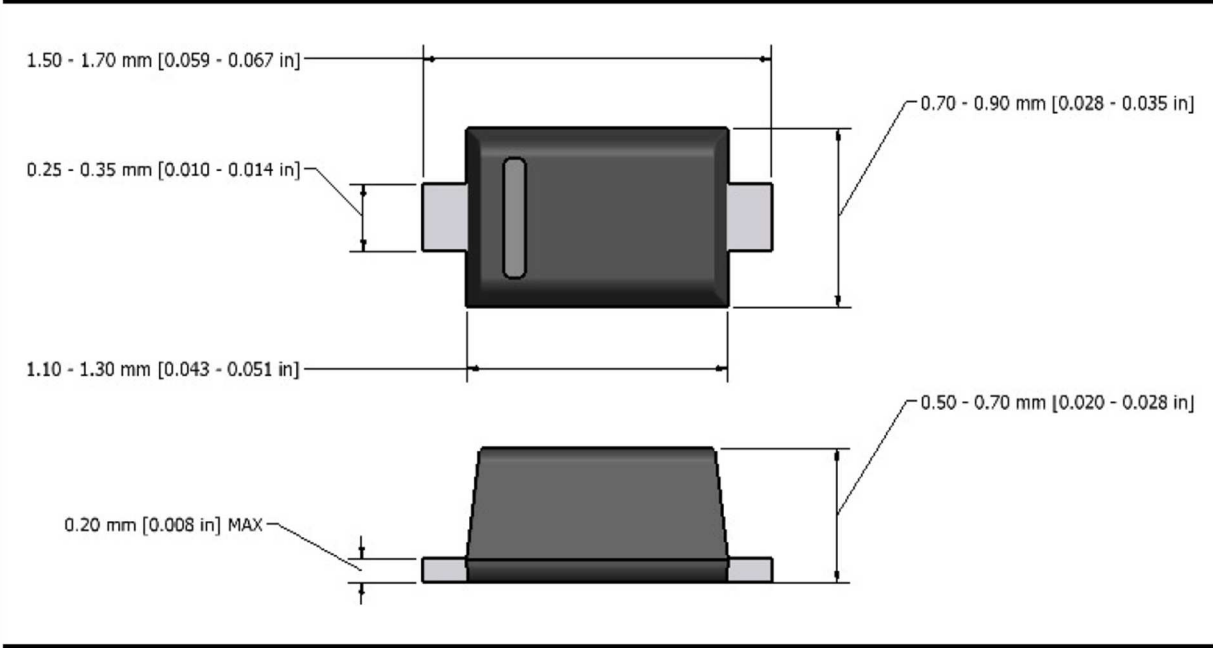


Reverse Current vs Reverse Voltage



Package Dimension

SOD-523







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