

SSCBAS20HD2

Fast Switching Diode

Features

- ♦ Fast Switching Speed
- ♦ Ultra-Small Surface Mount Package
- ♦ Low Reverse Leakage Current
- ♦ Ideal for Battery Powered Portable Applications
- ♦ RoHS Compliant/Green EMC
- ♦ Moisture Sensitivity: Level 3 per J-STD-020

PIN configuration



SOD-323



Applications

- ♦ High speed switching for detection
- ♦ Battery Powered Portable
- ♦ Mobile phones, laptops and other electronic devices



Absolute maximum rating @T_A=25℃

| Parameter | Symbol | Value | Unit |
|--|------------------|------------|------|
| Non-Repetitive Peak Reverse Voltage | V _{RM} | 200 | V |
| Repetitive Peak Reverse Voltage | V _{RRM} | | |
| Working Peak Reverse Voltage | V_{RWM} | 200 | V |
| Reverse Voltage (DC) | V _R | | |
| Average Rectified Forward Current | lo | 250 | mA |
| Non-Repetitive Peak Forward Surge Current@ t=8.3ms | I _{FSM} | 625 | mA |
| Power Dissipation | PD | 200 | mW |
| Thermal Resistance from Junction to Ambient | R _{eJA} | 625 | °C/W |
| Operating Temperature | TJ | -55 ~ +150 | °C |
| Storage Temperature | T _{STG} | -55 ~ +150 | °C |



SSCSBAS20HD2

• Electrical Characteristics @T_A=25℃

| Parameter | Symbol | Conditions | Min. | Тур. | Max. | Unit |
|-----------------------|-----------------|--|------|------|------|------|
| Reverse Voltage | V_{R1} | I _R = 100μA | 250 | | | V |
| Famurand Voltage | \/ | I _F = 100mA | | | 1 | V |
| Forward Voltage | V _F | I _F = 200mA | | | 1.25 | V |
| Reverse Current | I _R | V _R = 200V | | | 1 | nA |
| Total Capacitance | Ст | V _R = 0,f = 1MHz | | | 5 | pF |
| Reverse Recovery Time | t _{rr} | $I_F = I_R = 30 \text{mA},$ | | | 50 | 20 |
| | | $I_{rr} = 0.1 \times I_{R}, R_{L} = 100\Omega$ | | | 30 | ns |

• Typical Performance Characteristics

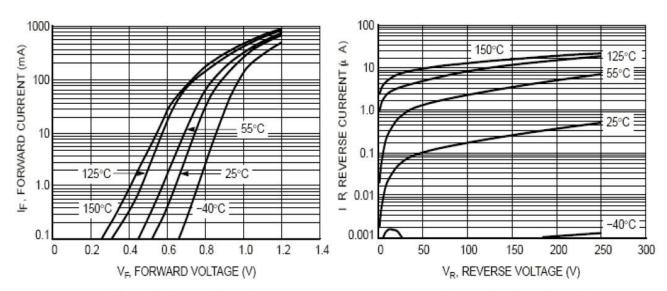


Figure 2. Forward Current

Figure 3. Leakage Current

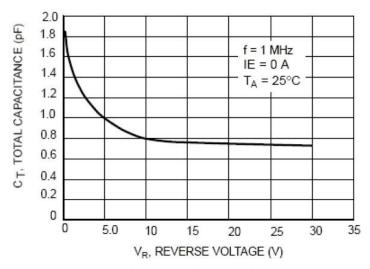


Figure 4. Total Capacitance



Package Information

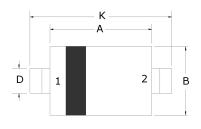
Ordering Information

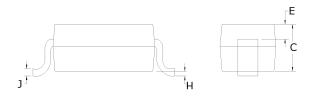
| Device | Package | Marking | Qty per Reel | Reel Size |
|--------------|---------|---------|--------------|-----------|
| SSCSBAS20HD2 | SOD-323 | JR | 3000 | 7 Inch |

Mechanical Data

Case: SOD-323

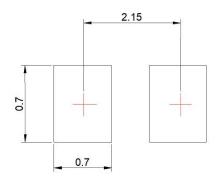
Case Material: Molded Plastic. UL Flammability





| Dim | Millimeters | | |
|-------|-------------|------|--|
| ווווט | Min | Max | |
| Α | 1.60 | 1.80 | |
| В | 1.2 | 1.40 | |
| С | 0.80 | 0.90 | |
| D | 0.25 | 0.35 | |
| E | 0.15REF | | |
| н | 0 | 0.10 | |
| J | 0.08 | 0.15 | |
| K | 2.50 | 2.70 | |

Recommended Pad outline (Unit: mm)



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