

SSCS0530D1

Schottky Barrier Diode

Features

- ♦ Low Forward Voltage Drop
- ♦ Guard Ring Construction for Transient Protection
- ♦ High Conductance
- ♦ Also Available in Lead Free Version

PIN configuration

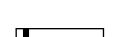


SOD-123

Applications

- ♦ High-Efficiency DC-DC Conversion
- ♦ Switch Mode Power Supply
- ♦ Inverse Polarity Protection





SE

<u>Marking</u>

Absolute maximum rating @T_A=25℃

| Parameter | Symbol | Value | Unit |
|--|------------------|------------|------|
| Peak Repetitive Peak Reverse Voltage | V_{RRM} | | |
| Working Peak Reverse Voltage | V _{RWM} | 30 | V |
| DC Blocking Voltage | V _R | | |
| Average Rectified Output Current | Io | 500 | mA |
| Non-repetitive Peak Forward Surge Current @t=8.3ms | I _{FSM} | 5.5 | Α |
| Power Dissipation | P _D | 500 | mW |
| Typical Thermal Resistance | R _{θJA} | 200 | °C/W |
| Operating Temperature | TJ | -40 ~ +125 | °C |
| Storage Temperature | T _{STG} | -50 ~ +150 | °C |

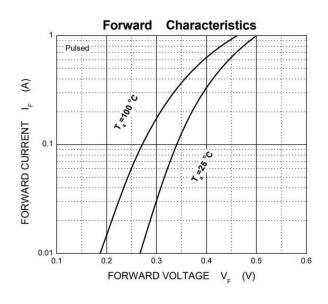


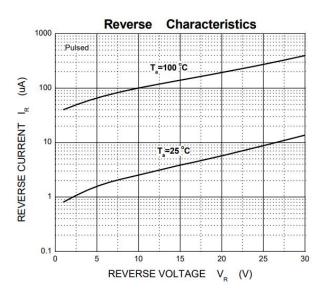


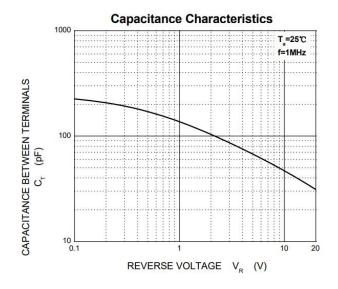
• Electrical Characteristics @T_A=25℃

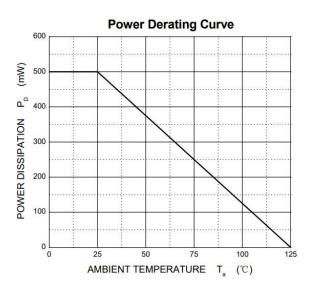
| Parameter | Symbol | Conditions | Min. | Тур. | Max. | Unit |
|--------------------------------|----------------|------------------------|------|------|-------|----------|
| Reverse Voltage | V_R | I _R = 200μA | 30 | | | ٧ |
| Forward Voltage | VF | I _F = 0.1A | | | 0.375 | \ |
| Forward Voltage V _F | VF | I _F = 0.5A | | | 0.430 |] V |
| Reverse Current | I. | V _R = 15V | | | 20 | uA |
| | I _R | V _R = 30V | | | 130 | |
| Junction Capacitance | CJ | $V_R = 1V, f = 1MHz$ | | 170 | | pF |

• Typical Performance Characteristics











Package Information

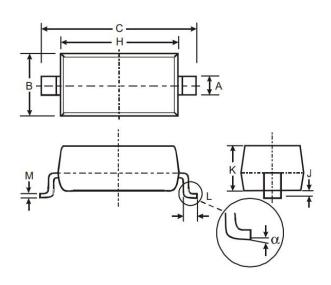
Ordering Information

| Device | Package | Marking | Qty per Reel | Reel Size |
|------------|---------|---------|--------------|-----------|
| SSCS0530D1 | SOD-123 | SE | 3000 | 7 Inch |

Mechanical Data

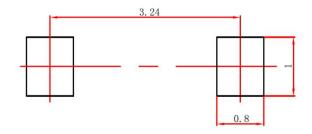
Case: SOD-123

Case Material: Molded Plastic. UL Flammability



| DIM | Millimeters | | |
|-------|-------------|------|--|
| DIIVI | Min | Max | |
| Α | 0.45 | 0.65 | |
| В | 1.50 | 1.70 | |
| С | 3.55 | 3.85 | |
| Н | 2.6 | 2.8 | |
| J | 0.00 | 0.10 | |
| К | 1.05 | 1.15 | |
| L | 0.25 | 0.45 | |
| М | 0.08 | 0.15 | |
| α | 0 | 8° | |

Recommended Pad outline (Unit: mm)





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