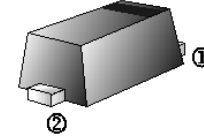


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Small Package
- Low Reverse Current
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion

SOD-523



MARKING

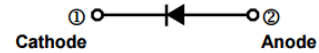
T5

PACKAGE INFORMATION

| Package | MPQ | Leader Size |
|---------|-----|-------------|
| SOD-523 | 8K | 7 inch |

ORDER INFORMATION

| Part Number | Type |
|-------------|---------------------------------|
| SCS4448S-C | Lead (Pb)-free and Halogen-free |



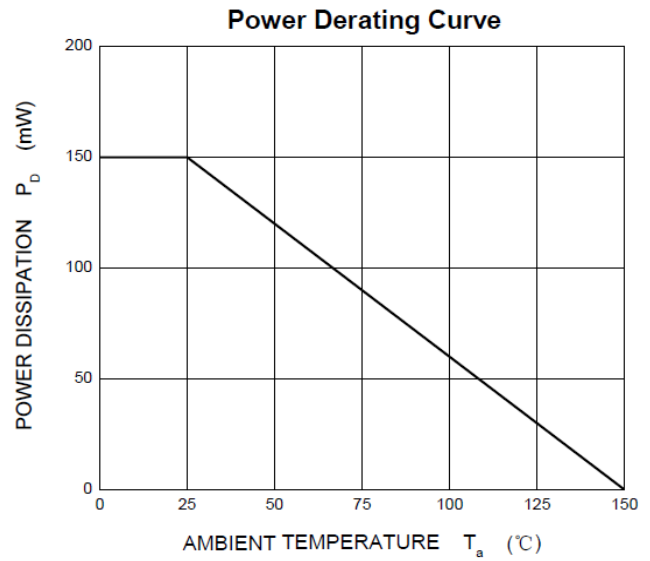
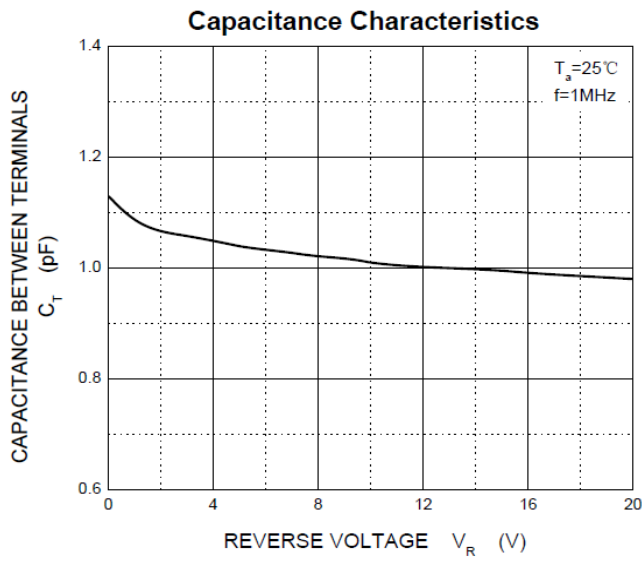
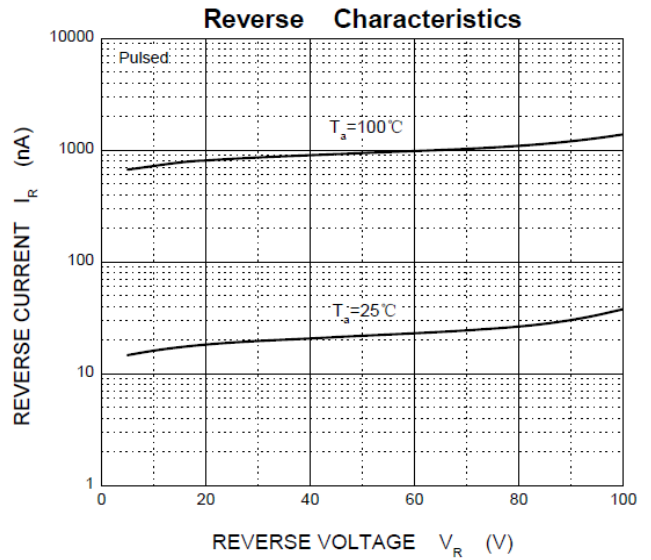
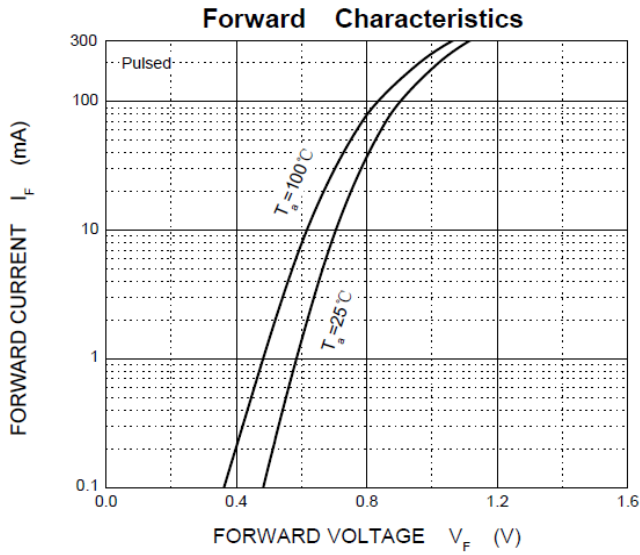
ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

| Parameter | Symbol | Ratings | Unit |
|--|-----------------------------------|--------------|------|
| Non-Repetitive Peak Reverse Voltage | V _{RM} | 100 | V |
| Peak Repetitive Peak Reverse Voltage | V _{RPM} | 100 | |
| Working Peak Reverse Voltage | V _{RWM} | 100 | |
| DC Blocking Voltage | V _R | 75 | |
| RMS Reverse Voltage | V _{R(RMS)} | 53 | |
| Forward Continuous Current | I _F | 500 | mA |
| Average Rectified Output Current | I _O | 250 | mA |
| Non-Repetitive Peak Forward Surge Current @t=8.3ms | I _{FSM} | 2 | A |
| Power Dissipation | P _D | 150 | mW |
| Thermal Resistance, Junction-Ambient | R _{θJA} | 833 | °C/W |
| Operating Junction & Storage Temperature Range | T _J , T _{STG} | 150, -55~150 | °C |

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

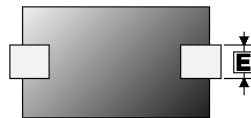
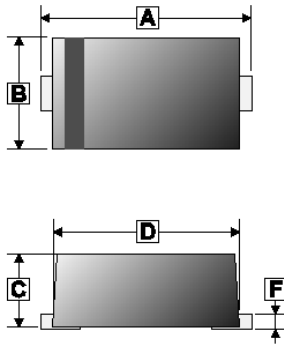
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|---------------------------|--------------------|------|------|------|------|---|
| Reverse Breakdown Voltage | V _{(BR)R} | 75 | - | - | V | I _R =5μA |
| | | 100 | - | - | | I _R =100μA |
| Forward Voltage | V _F | 0.62 | - | 0.72 | V | I _F =5mA |
| | | - | - | 1 | | I _F =100mA |
| Reverse Leakage Current | I _R | - | - | 25 | nA | V _R =20V |
| Reverse Recovery Time | t _{rr} | - | 4 | - | nS | I _F =I _R =10mA, R _L =100Ω, I _{rr} =0.1xI _R |
| Capacitance | C _T | - | 1.12 | - | pF | V _R =0, f=1MHz |

CHARACTERISTIC CURVES



PACKAGE OUTLINE DIMENSIONS

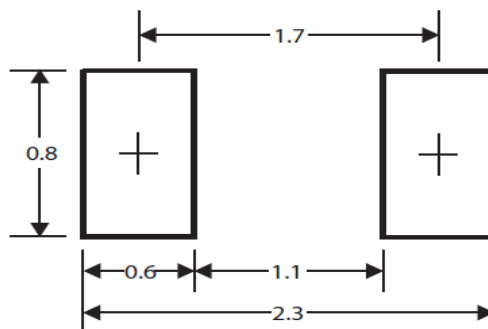
SOD-523



| REF. | Millimeter | |
|------|------------|------|
| | Min. | Max. |
| A | 1.50 | 1.70 |
| B | 0.70 | 0.90 |
| C | 0.50 | 0.77 |
| D | 1.10 | 1.30 |
| E | 0.25 | 0.40 |
| F | 0.05 | 0.20 |

MOUNTING PAD LAYOUT

SOD-523



*Dimensions in millimeters