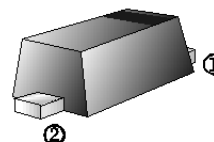


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Fast Switching Device
- General Purpose Diodes
- Flat Lead SOD-323L Small Outline Plastic Package
- Surface Device Type Mounting
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

SOD-323L

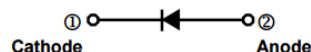


MARKING

S1

PACKAGE INFORMATION

| Package | MPQ | Leader Size |
|----------|-----|-------------|
| SOD-323L | 3K | 7 inch |



ORDER INFORMATION

| Part Number | Type |
|--------------|---------------------------------|
| SCS4148LWS-C | Lead (Pb)-free and Halogen-free |

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

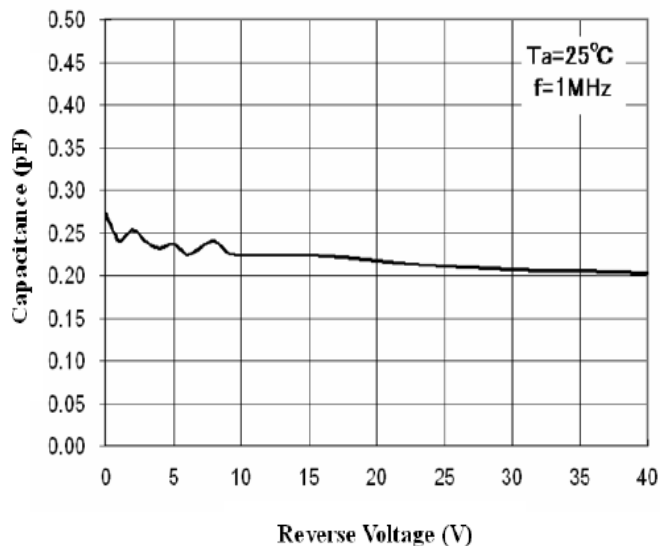
| Parameter | Symbol | Ratings | Unit |
|--|-----------------------------------|--------------|------|
| Non-Repetitive Peak Reverse Voltage | V _{RSM} | 100 | V |
| Repetitive Peak Reverse Voltage | V _{RRM} | 75 | V |
| Repetitive Peak Forward Current | I _{FRM} | 300 | mA |
| Peak Forward Surge Current (Pulse Width=1μs) | I _{FSM} | 2 | A |
| Continuous Forward Current | I _O | 150 | mA |
| Power Dissipation | P _D | 200 | mW |
| Thermal Resistance from Junction Ambient | R _{θJA} | 650 | °C/W |
| Operating Temperature, Storage Temperature | T _J , T _{STG} | 150, -55~150 | °C |

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

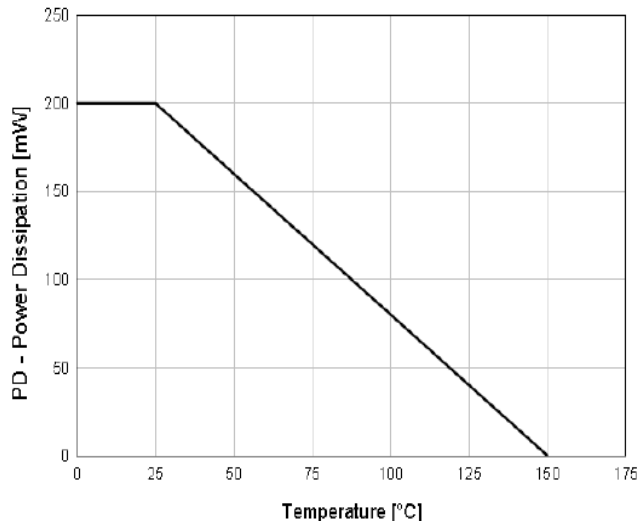
| Parameters | Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|-------------------------|-----------------|------|------|------|------|--|
| Breakdown Voltage | B _V | 100 | - | - | V | I _R =100μA |
| | | 75 | - | - | | I _R =5μA |
| Forward Voltage | V _F | - | - | 1 | V | I _F =10mA |
| Reverse Leakage Current | I _R | - | - | 25 | nA | V _R =20V |
| | | - | - | 5 | μA | V _R =75V |
| Capacitance | C | - | 4 | - | pF | V _R =0, f=1MHz |
| Reverse Recovery Time | T _{RR} | - | 4 | - | nS | I _F =10mA, I _R =60mA, I _{RR} =1mA, R _L =100Ω |

RATINGS AND CHARACTERISTIC CURVES

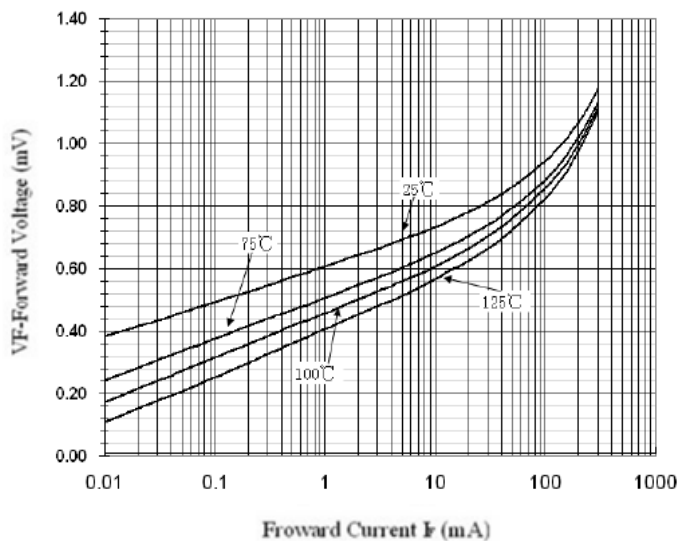
Total Capacitance



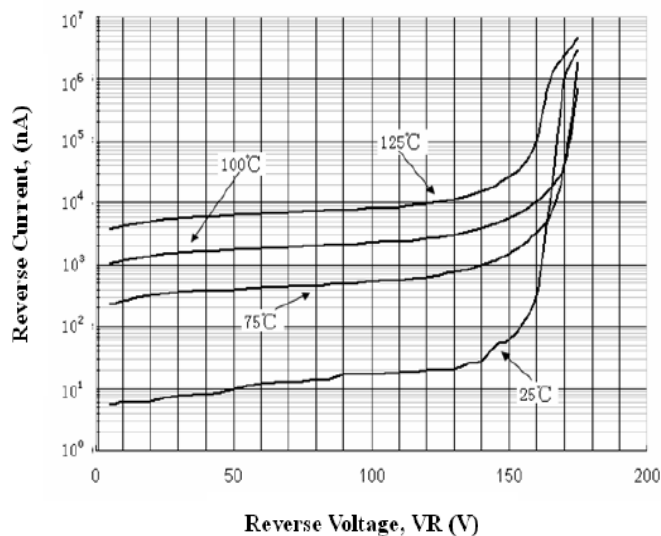
Power Derating Curve



Forward Voltage vs Ambient Temperature

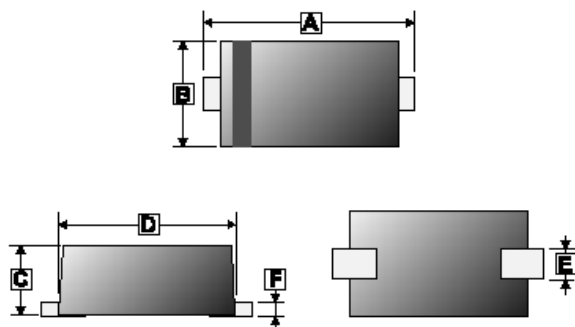


Reverse Current vs Reverse Voltage



PACKAGE OUTLINE DIMENSIONS

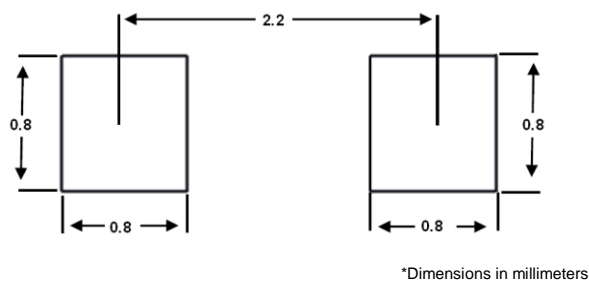
SOD-323L



| REF. | Millimeter | |
|------|------------|------|
| | Min. | Max. |
| A | 2.30 | 2.80 |
| B | 1.05 | 1.60 |
| C | 0.60 | 1.08 |
| D | 1.60 | 2.10 |
| E | 0.25 | 0.70 |
| F | 0.05 | 0.25 |

MOUNTING PAD LAYOUT

SOD-323L



*Dimensions in millimeters