

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

FEATURES

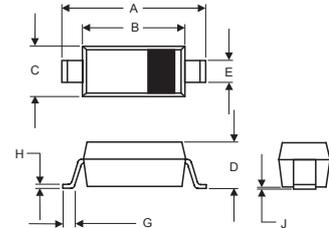
- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering : 250°C for 10 Seconds at Terminals
- Low Forward Voltage

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Axial Leads, Solderable per MIL-STD-202 method 208 Guaranteed
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any

PACKAGE DIMENSIONS

SOD-123
PLASTIC PACKAGE



| DIM | MILLIMETERS | | INCHES | |
|-----|-------------|-------|--------|-------|
| | MIN | MAX | MIN | MAX |
| A | 3.55 | 3.85 | 0.140 | 0.152 |
| B | 2.55 | 2.85 | 0.100 | 0.112 |
| C | 1.40 | 1.80 | 0.550 | 0.071 |
| D | ----- | 1.25 | ----- | 0.049 |
| E | 0.30 | 0.78 | 0.120 | 0.031 |
| G | 0.15 | ----- | 0.006 | ----- |
| H | ----- | 0.25 | ----- | 0.001 |
| J | ----- | 0.15 | ----- | 0.006 |

MARKING CODE

| | |
|---------|-----------|
| SCS220P | SJ |
| SCS230P | SK |
| SCS240P | SL |

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| TYPE NUMBER | SYMBOL | SCS220P | SCS230P | SCS240P | UNITS |
|---|-------------|-------------|---------|---------|-------|
| Peak Repetitive Peak reverse voltage | V_{RRM} | 20 | 30 | 40 | V |
| Working Peak Reverse Voltage | V_{RWM} | | | | |
| Maximum DC Blocking Voltage | V_R | | | | |
| Average Forward Current @ $T_J=25^\circ\text{C}$ | $I_{F(AV)}$ | 2.0 | | | A |
| Peak Forward Current @ 8.3 ms Half Sine | I_{FSM} | 10 | | | A |
| Maximum Instantaneous Forward Voltage | V_F | 0.38 | 0.40 | 0.42 | V |
| $V_F @ I_{FM} = 0.5 \text{ A}, T_A = 25^\circ\text{C}$ | | 0.45 | 0.47 | 0.50 | |
| $V_F @ I_{FM} = 1.0 \text{ A}, T_A = 25^\circ\text{C}$ | | 0.65 | 0.68 | 0.72 | |
| Maximum DC Reverse Current | I_R | 1 | | | mA |
| At Rated DC Blocking Voltage @ $T_J = 25^\circ\text{C}$ | | | | | |
| Typical Junction Capacitance | C_J | 215 | | | pF |
| Operating Temperature Range | T_J | -50 ~ + 125 | | | °C |
| Storage temperature | T_{STG} | -65 ~ + 150 | | | °C |

NOTES:

1. Measured at 1MHz and applied reverse voltage of 5.0 V D.C.
2. Thermal Resistance Junction to Ambient.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

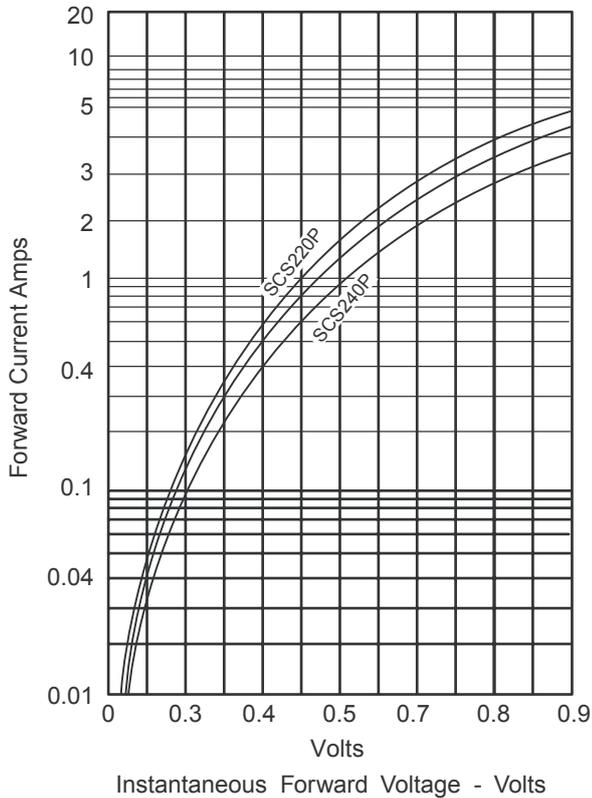


FIG.2-JUNCTION CAPACITANCE

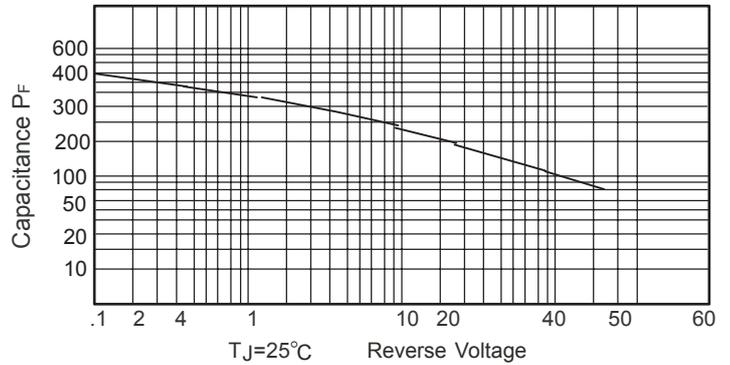


FIG.3-FORWARD DERATING CURVE

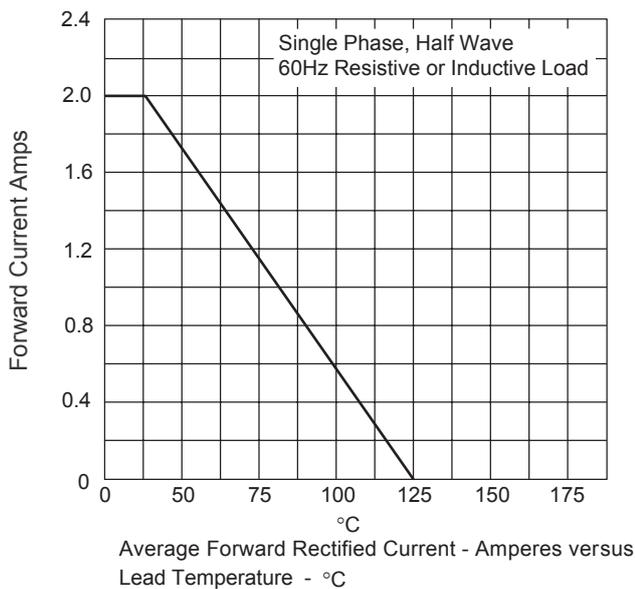


FIG.4-PEAK FORWARD SURGE CURRENT

