

Plating pb free is indicated by box



### FEATURES

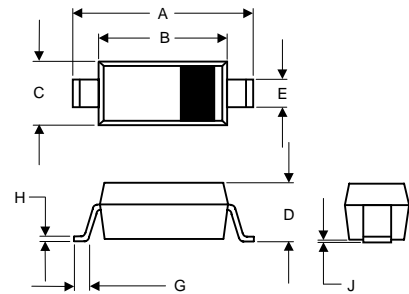
- RoHS Compliant Product
- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering : 250°C for 10 Seconds at Terminals
- Low Forward Voltage

### 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	-----	1.15	-----	0.045
E	0.30	0.78	0.120	0.031
G	0.15	-----	0.006	-----
H	-----	0.25	-----	0.001
J	-----	0.15	-----	0.006

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

#### NOTES:

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

Marking Code	
SCS220P	SJ
SCS230P	SK
SCS240P	SL

## ● RATING AND CHARACTERISTIC CURVES (SCS220P THRU SCS240P)

FIG.1 TYPICAL FORWARD CHARACTERISTICS

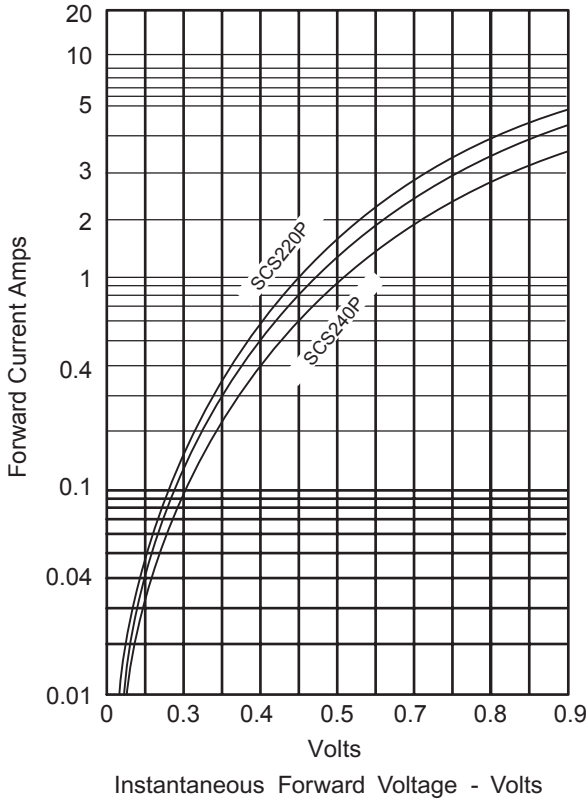


FIG.2 JUNCTION CAPACITANCE

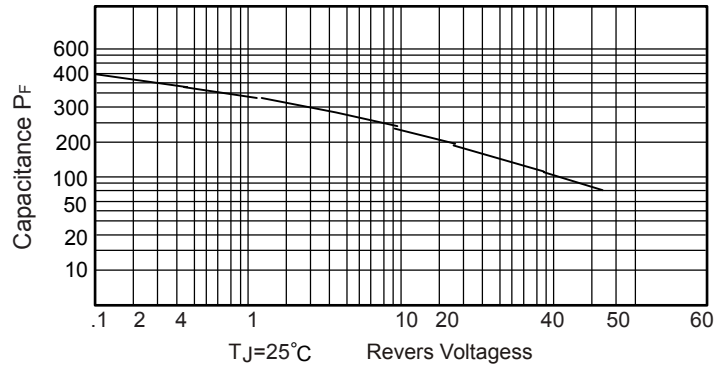


FIG.3 FORWARD DERATING CURVE

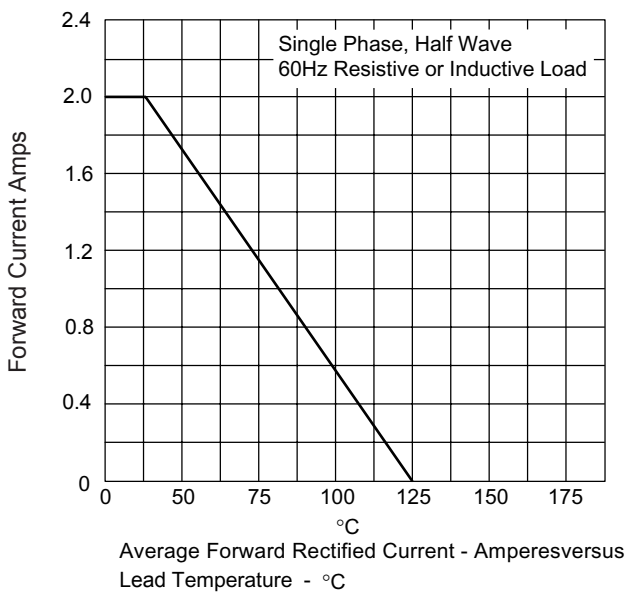


FIG.4 PEAK FORWARD SURGE CURRENT

