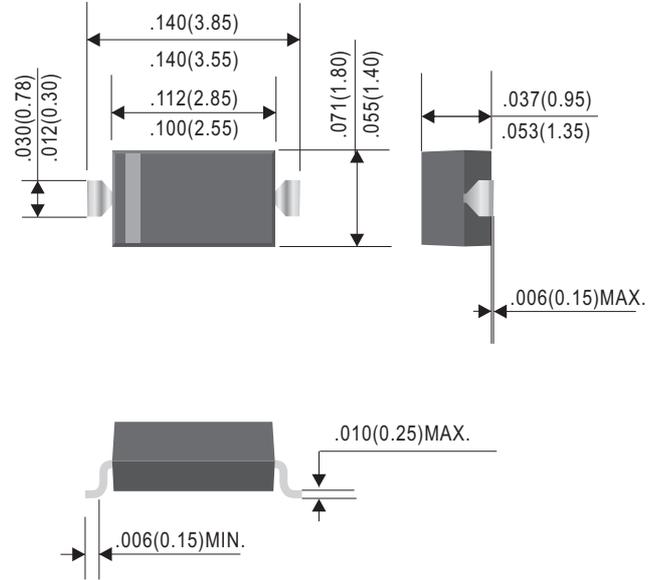


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PACKAGE DIMENSIONS

SOD-123P
PLASTIC PACKAGE



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

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	SCS0520P	SCS0530P	SCS0540P	SCS0560P	SCS0580P	SCS05100P	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	60	80	100	V
Working Peak Reverse Voltage	20	30	40	60	80	100	V
Maximum DC Blocking Voltage	20	30	40	60	80	100	V
Average Forward Current ($I_{F(AV)}$ @ $T_J = 90^\circ\text{C}$)	0.5						A
Peak Forward Current (I_{FSM} @ 8.3ms half sine)	5.5						A
Maximum Instantaneous Forward Voltage ($V_F @ I_{FM} = 0.5\text{A}$, $T_A = 25^\circ\text{C}$)	0.45	0.52	0.65	0.83			V
Maximum DC Reverse Current At Rated DC Blocking Voltage ($I_R @ T_J = 25^\circ\text{C}$)	0.2						mA
Typical Junction Capacitance (C_J)	30						pF
Operating Temperature Range T_J	-50 — +150						°C
Storage Temperature Range T_{STG}	-65 — +175						°C

NOTES:

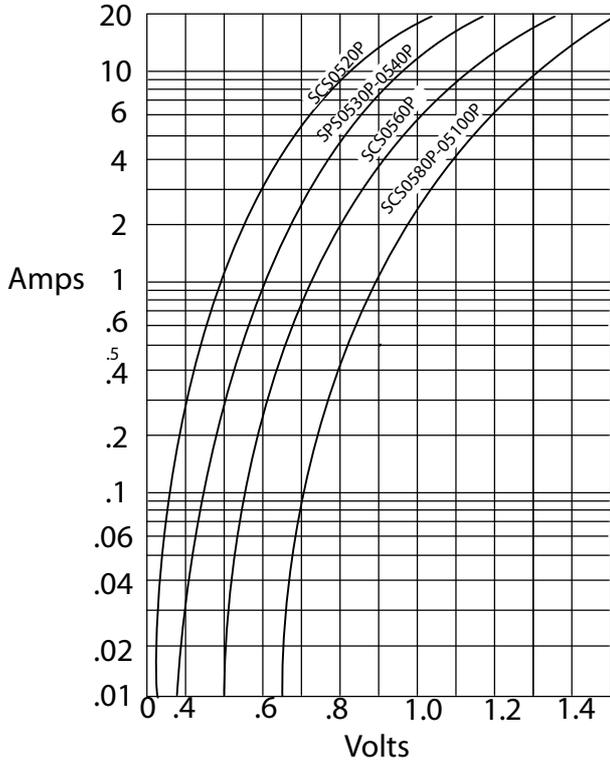
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.

Marking Code

SCS0520P	BB or B2
SCS0530P	BH or B3
SCS0540P	BJ or B4
SCS0560P	BS
SCS05100P	BT

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FIG.1 TYPICAL FORWARD CHARACTERISTICS



Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

FIG.2-JUNCTION CAPACITANCE

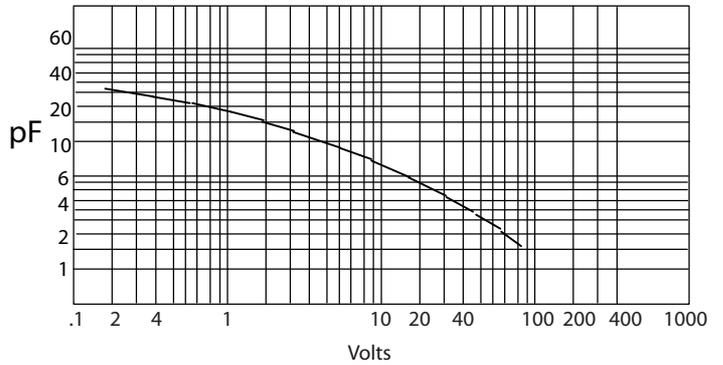
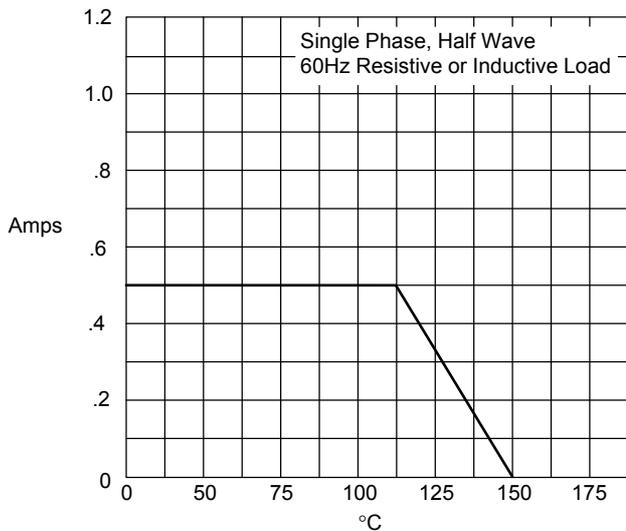
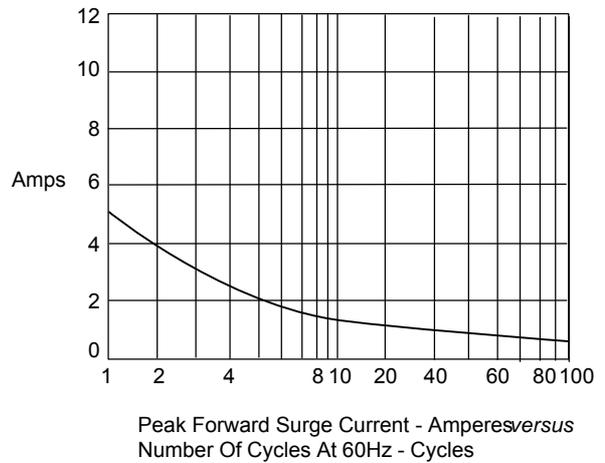


FIG.3-FORWARD DERATING CURVE



Average Forward Rectified Current - Amperes versus
Ambient Temperature - °C

FIG.4-PEAK FORWAED SURGE CURRENT



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles