MOSPEC

SCS120P THRU SCS1100P

VOLTAGE 20V ~ 100V

1.0 AMP Schottky Barrier Rectifiers

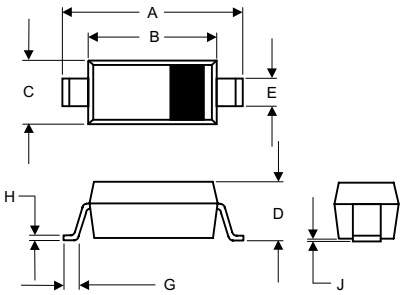
Plating pb free is indicated by box

●FEATURES

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

PACKAGE DIMENSIONS

SOD–123
PLASTIC PACKAGE



DIM	MILLMETERS MIN	MILLMETERS MAX	INCHES MIN	INCHES 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	------	1.35	------	0.053
E	0.30	0.78	0.120	0.031
G	0.15	------	0.006	-------
H	-----	0.25	-------	0.001
J	-----	0.15	-------	0.006

●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℃ ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SCS120P	SCS130P	SCS140P	SCS160P	SCS180P	SCS1100P	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 ℃)	1.0						A
Peak Forward Current (I_{FSM} @ 8.3 ms Half Sine)	20						A
Maximum Instantaneous Forward Voltage (V_F @ I_{FM} = 1.0 A , T_A = 25 ℃)	0.45	0.55		0.66	0.83		V
Maximum DC Reverse Current At Rated DC Blocking Voltage (I_R @ T_J = 25 ℃)	0.3						mA
Typical Junction Capacitance (C_J)	30						pF
Operating Temperature Range T_J	- 50 ~ + 150						℃
Storage Temperature Range T_{STG}	- 65 ~ + 175						℃

NOTES:

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

Marking Code	
SCS120P	BR
SCS130P	BU
SCS140P	BM
SCS160P	XG
SCS180P	XK
SCS1100P	XH

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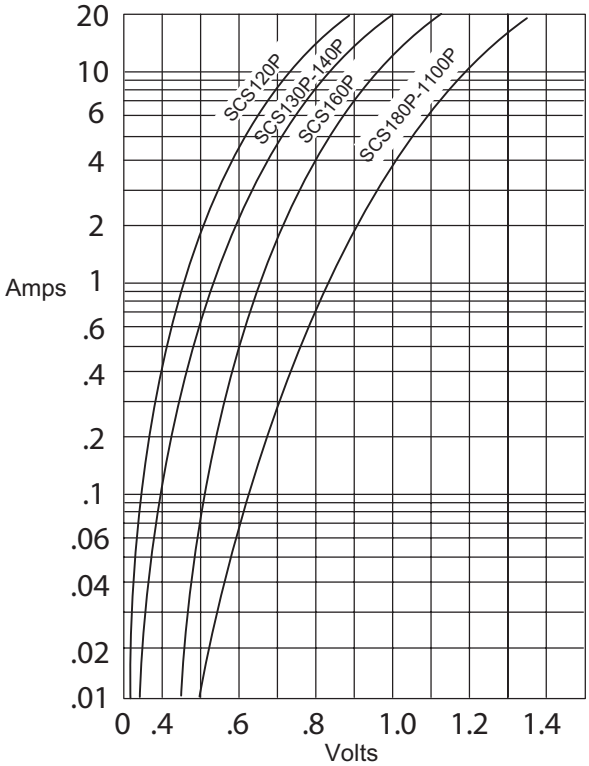
●RATING AND CHARACTERISTIC CURVES (SCS120P THRU SCS1100P)

FIG.1 TYPICAL FORWARD CHARACTERISTICS



Instantaneous Forward Current - Amps peresversus
Instantaneous Forward Voltage - Volts

FIG.2-JUNCTION CAPACITANCE

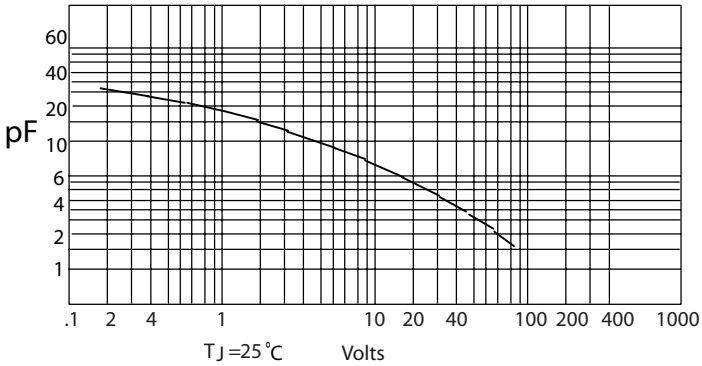
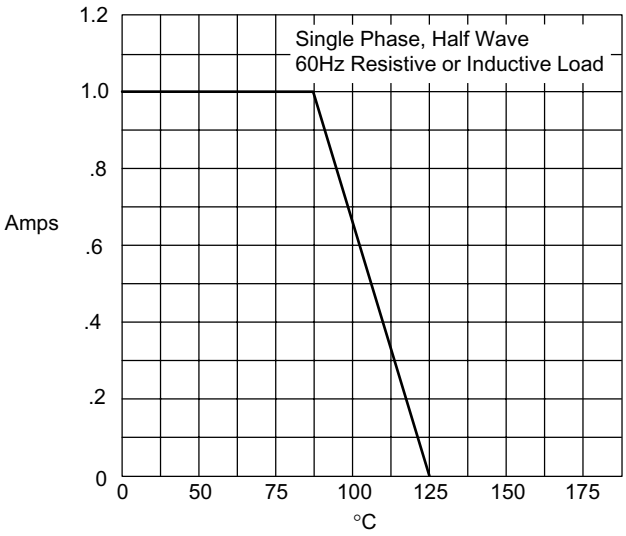
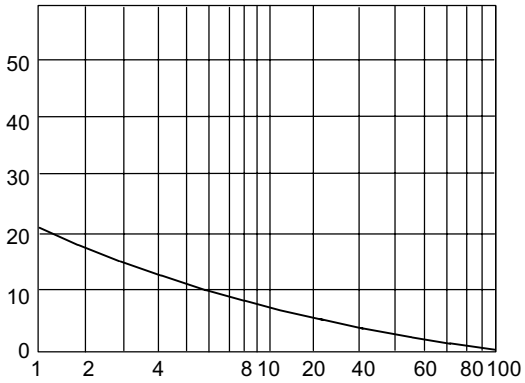


FIG.3-FORWARD DERATING CURVE



Average Forward Rectified Current - Amperesversus
Ambient Temperature - °C

FIG.4-PEAK FORWAED SURGE CURRENT



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