WILLAS

SCS120P1 THRU SCS1100P1

VOLTAGE 20V ~ 100V

1.0AMP Schottky Barrier Rectifiers

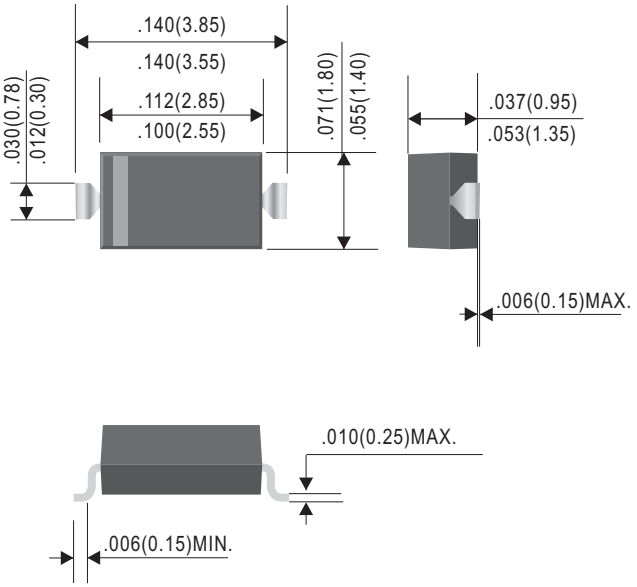
FEATURES

- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering : 250 ˚C for 10 Seconds At Terminals
- Low Forward Voltage
- RoHS product for packing code suffix "G"

  Halogen free product for packing code suffix "H"

PACKAGE DIMENSIONS

SOD–123P
PLASTIC PACKAGE



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

Weight:0.009g

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		SCS120P1	SCS130P1	SCS140P1	SCS160P1	SCS180P1	SCS1100P1	UNITS
Maximum Recurrent Peak Reverse Voltage		20	30	40	60	80	100	V
Working Peak Reverse Voltage		20	30	40	60	80	100	
Maximum DC Blocking Voltag		20	30	40	60	80	100	V
Average Forward Current ($I_{F(AV)}$@ T_J=90˚C)		1.0						A
Reak Forward Current (I_{FSM}@ 8.3ms half sine)		20						A
Maximum Instantaneous Forward Voltage (V_F@I_{FM} = 1.0A , T_A = 25 ˚C)		0.45	0.52		0.66	0.83		V
Maximum DC Reverse Current At Rated DC Blocking Voltage	(I_R @ T_J = 25˚C)	0.1						mA
	(I_R @ T_J = 125˚C)	5.0						
Typical Junction Capacitance (C_J)		30						pF
Operating Temperature Range T_J		-50 —+150						˚C
Storage Temperature Range T_{STG}		-65 —+175						˚C

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

Marking Code	
SCS120P1	BR or X2
SCS130P1	BU or X3
SCS140P1	BM or X4
SCS160P1	XG
SCS180P1	XK
SCS1100P1	XH

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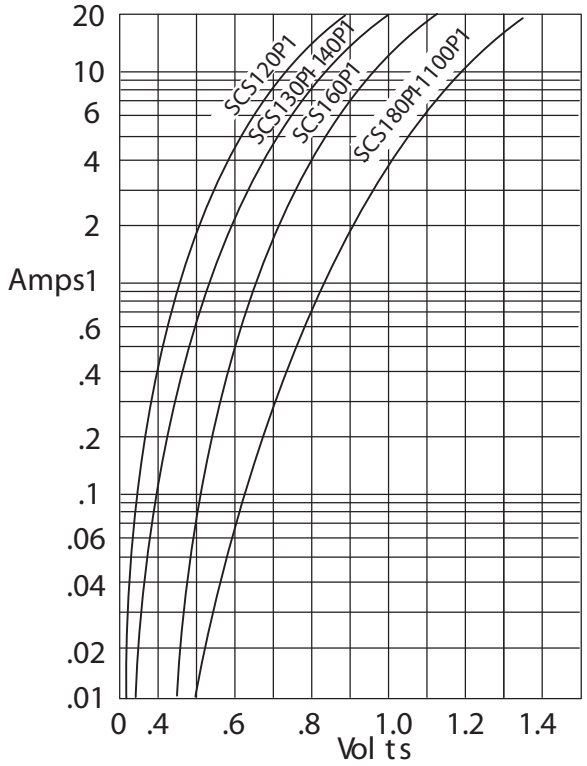
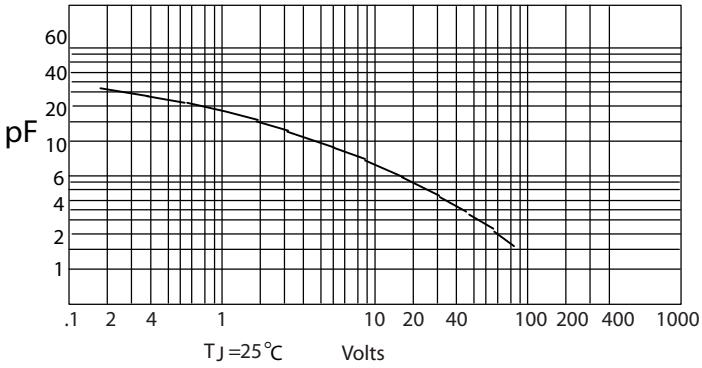
RATING AND CHARACTERISTIC CURVES (SCS120P1 THRU SCS1100P1)

FIG.1 TYPICAL FORWARD CHARACTERISTICS



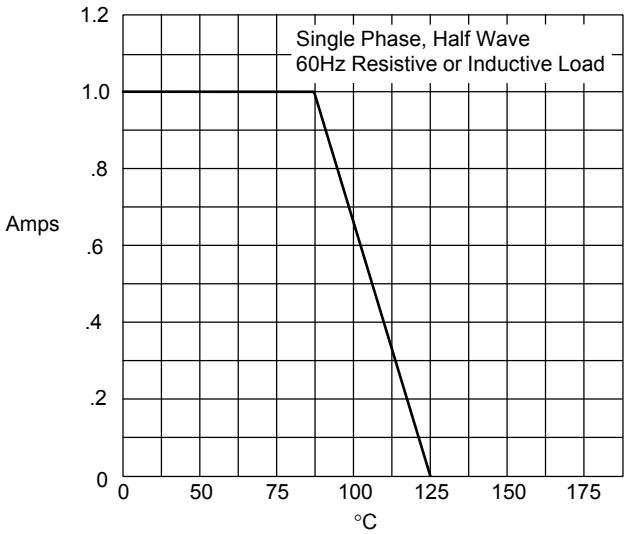
Instantaneous Forward Current -Am peresversus
Instantaneous Forward Voltage - Volts

FIG.2-JUNCTION CAPACITANCE



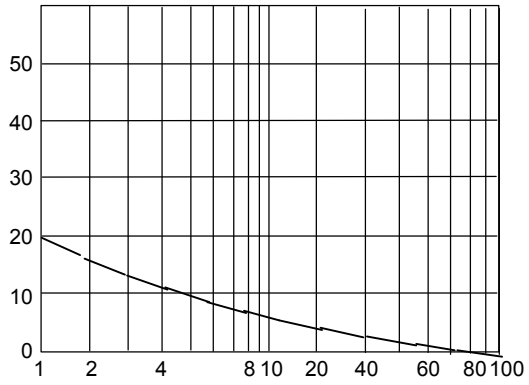
Amps

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