

TM

SD103AW THRU SD103CW

Features

- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)
- Guard Ring Protection
- Low Forward Voltage Drop
- Low Power Loss For High Efficiency
- Device Marking Code: SD103AW: S4
SD103BW: S5
SD103CW: S6

Maximum Ratings

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 300°C/W Junction to Ambient

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SD103AW	40V	28V	40V
SD103BW	30V	21V	30V
SD103CW	20V	14V	20V

Electrical Characteristics @ 25°C Unless Otherwise Specified

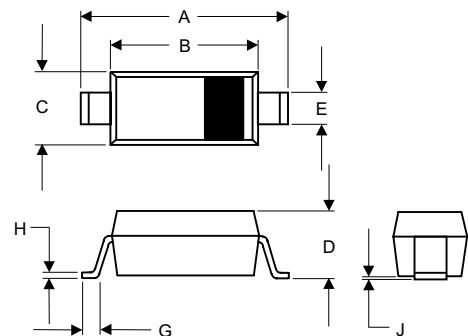
Average Forward Current	$I_{F(AV)}$	350mA	Note 1
Peak Forward Surge Current	I_{FSM}	1.5A	$t \leq 1.0s$
Maximum Power Dissipation	P_D	400mW	Note 1
Maximum (Note2) Instantaneous Forward Voltage	V_F	0.37V 0.60V	$I_{FM} = 20mA$ $I_{FM} = 200mA$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0µA	$V_R = 30V$ (AW) $V_R = 20V$ (BW) $V_R = 10V$ (CW)
Typical Junction Capacitance	C_j	50pF	Measured at 1.0MHz, $V_R=0V$
Typical Reverse Recovery Time	t_{rr}	10ns	$I_F = I_R = 200mA$ $I_{rr}=0.1 \times I_R$ $R_L=100\Omega$

Note: 1. Valid provided that electrodes are kept at ambient Temperature

2. Pulse test: Pulse width 300 µsec, Duty cycle 2%

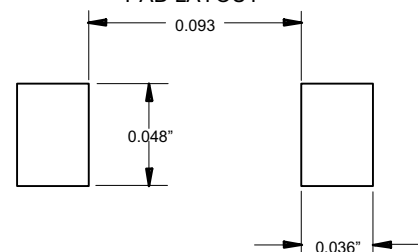
400mW Small Signal Schottky Diode 20 to 40 Volts

SOD-123



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	---	.053	---	1.35	
E	.012	.031	0.30	0.78	
G	.006	---	0.15	---	
H	---	.010	---	0.25	
J	---	.006	---	0.15	

SUGGESTED SOLDER PAD LAYOUT



SD103AW thru SD103CW

Figure 1
Typical Forward Characteristics

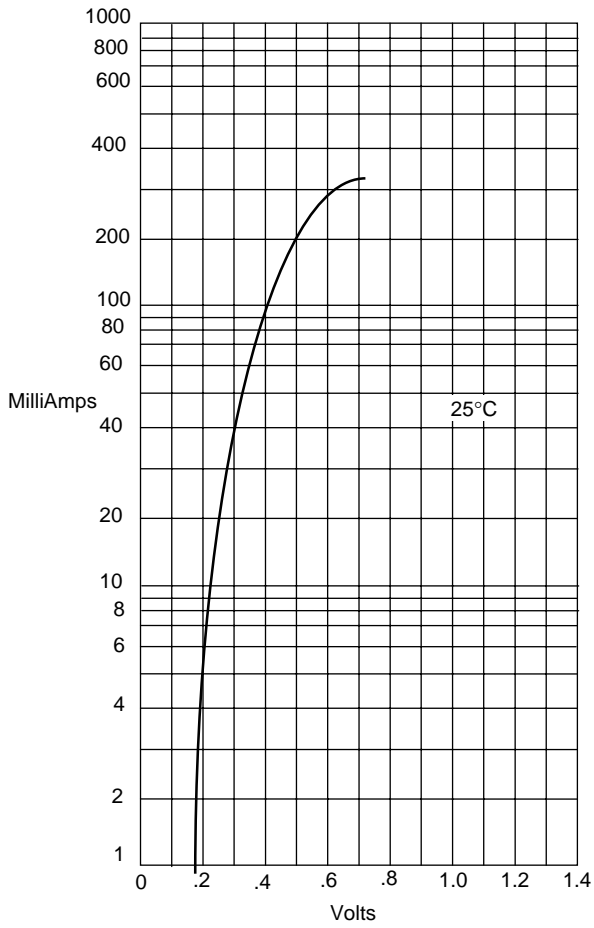


Figure 2
Typical Junction Capacitance

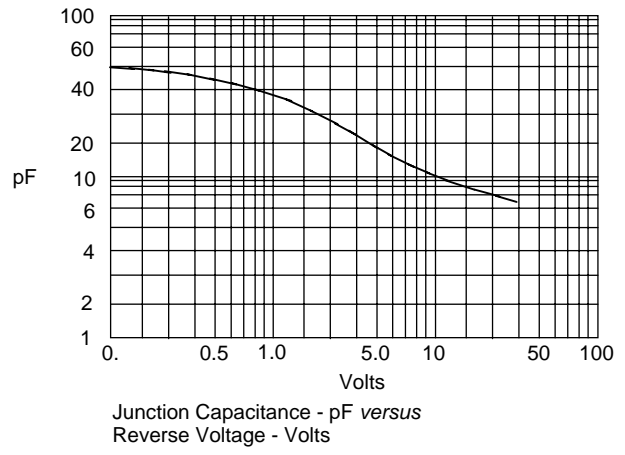
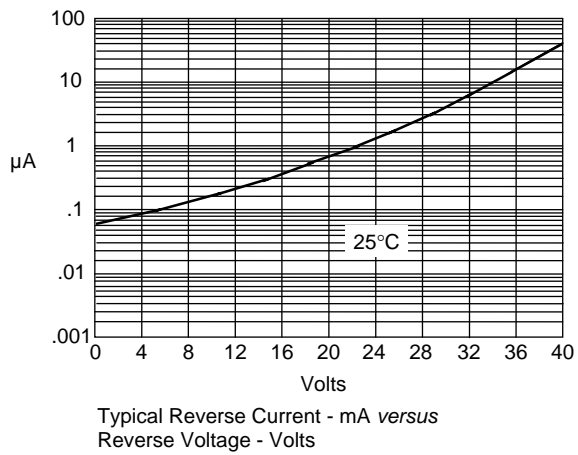


Figure 3
Typical Reverse Characteristics



Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel