Micro Commercial Components
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SD103AW THRU SD103CW

400mW Small Signal Schottky Diode 20 to 40 Volts

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

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Operating Temperature: -55℃ to +125℃
- Storage Temperature: -55℃ to +150℃
- Maximum Thermal Resistance; 300℃/W Junction to Ambient

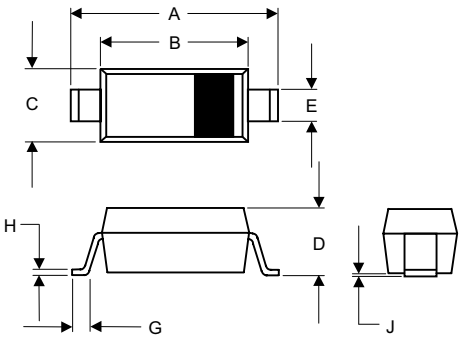
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SD103AW	40V	28V	40V
SD103BW	30V	21V	30V
SD103CW	20V	14V	20V

Electrical Characteristics @ 25℃ Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	350mA	Note 1
Peak Forward Surge Current	I_{FSM}	1.5A	t≦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×I_R R_L=100Ω

Note: 1.Valid provided that electrodes are kept at ambient Temperature
2.Pulse test: Pulse width 300 μsec, Duty cycle 2%

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

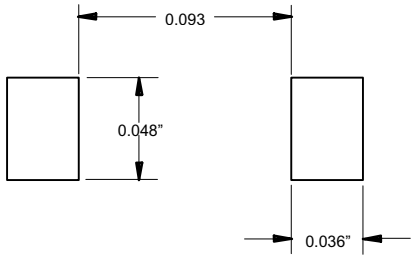


Figure 1
Typical Forward Characteristics

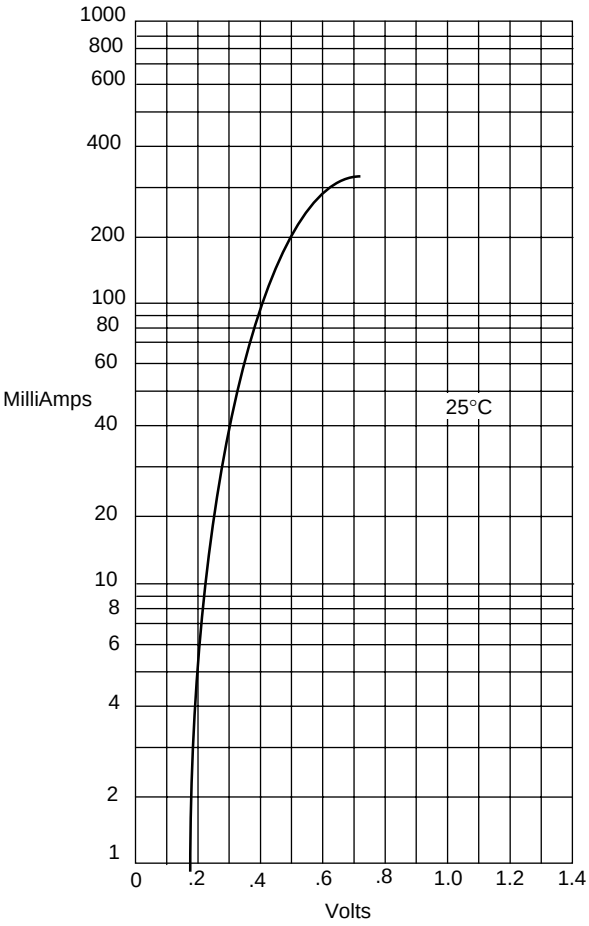
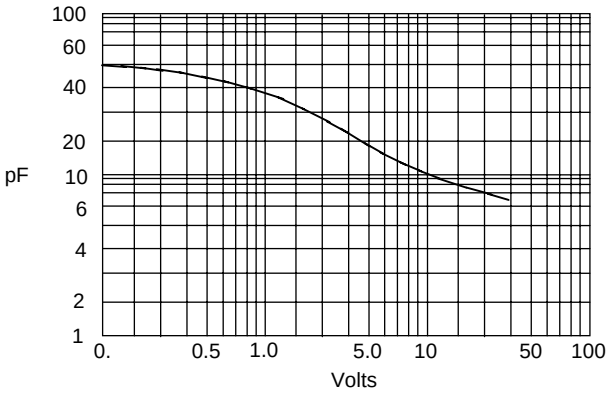
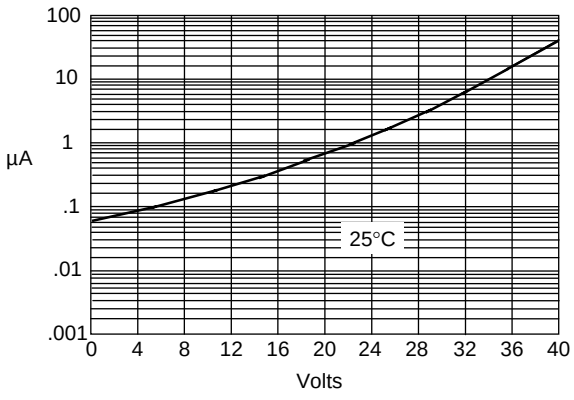


Figure 2
Typical Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts

Figure 3
Typical Reverse Characteristics



Typical Reverse Current - mA *versus*
Reverse Voltage - Volts

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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