

## **Features**

- Guard Ring Protection
- Low Forward Voltage Drop
- Low Power Loss For High Efficiency
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant("P" Suffix Designates RoHS Compliant.See Ordering Information)

# 400mW Small Signal Schottky Diode 20 to 40 Volts

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 250°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum	Maximum DC Blocking Voltage
SD103AW	S4	40V	28V	40V
SD103BW	S5	30V	21V	30V
SD103CW	S6	20V	14V	20V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

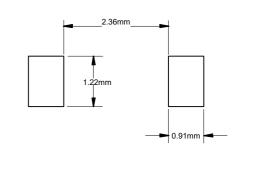
Average Forward Current	I <sub>F(AV)</sub>	350mA	Note 1
Peak Forward Surge Current	I <sub>FSM</sub>	1.5A	t≤1.0s
Maximum Power Dissipation	P <sub>d</sub>	400mW	Note 1
Maximum(Note 2) Instantaneous Forward Voltage	V <sub>F</sub>	0.37V 0.60V	I <sub>FM</sub> =20mA; I <sub>FM</sub> =200mA;
Maximum DC Reverse Current At Rated DC Blocking Voltage  SD103AW SD103BW SD103CW		5.0µA	VR = 30V VR = 20V VR = 10V
Typical Reverse Recovery Time	t <sub>rr</sub>	10ns	IF = IR =200mA $I_{rr}$ =0.1×IR $R_L$ =100 $\Omega$
Typical Junction Capacitance	С	50pF	Measured at 1.0MHz, VR=0.0V

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

# SOD-123

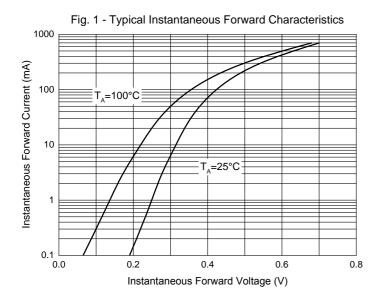
DIMENSIONS						
DIM	INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	0.140	0.152	3.55	3.85		
В	0.100	0.112	2.55	2.85		
С	0.055	0.071	1.40	1.80		
D		0.053		1.35		
E	0.018	0.026	0.45	0.65		
G	0.006		0.15			
Н		0.010		0.25		
J		0.006		0.15		

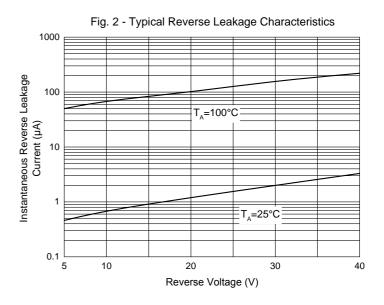
### Suggested Solder Pad Layout

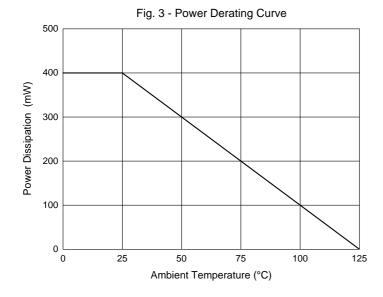




# **Curve Characteristics**









# **Ordering Information**

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

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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