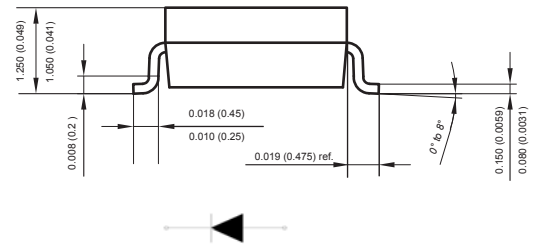
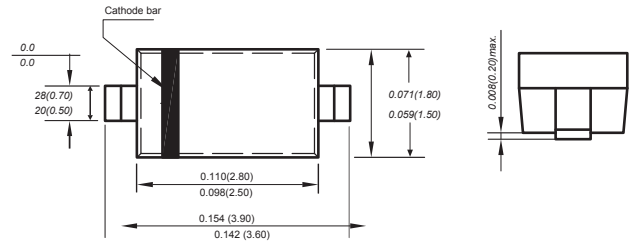


FEATURES

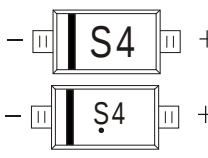
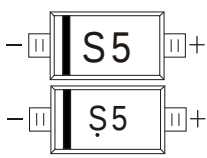
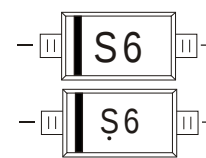
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Capacitance

SOD-123



Dimensions in inches and (millimeters)

MARKING:

SD103AW:S4	SD103BW:S5	SD103CW:S6
		

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

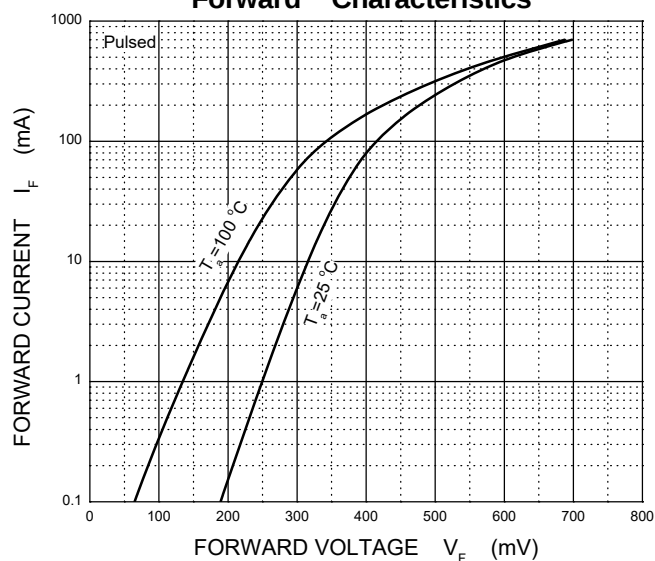
Symbol	Parameter	Value			Unit
		SD103AW	SD103BW	SD103CW	
V_{RRM}	Peak Repetitive Reverse Voltage	40	30	20	V
V_{RWM}	Working Peak Reverse Voltage				
$V_{R(RMS)}$	RMS Reverse Voltage	28	21	14	V
I_{FM}	Forward Continuous Current	350			mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@t= 8.3ms	2			A
P_D	Power Dissipation	400			mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	250			$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	125			$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150			$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

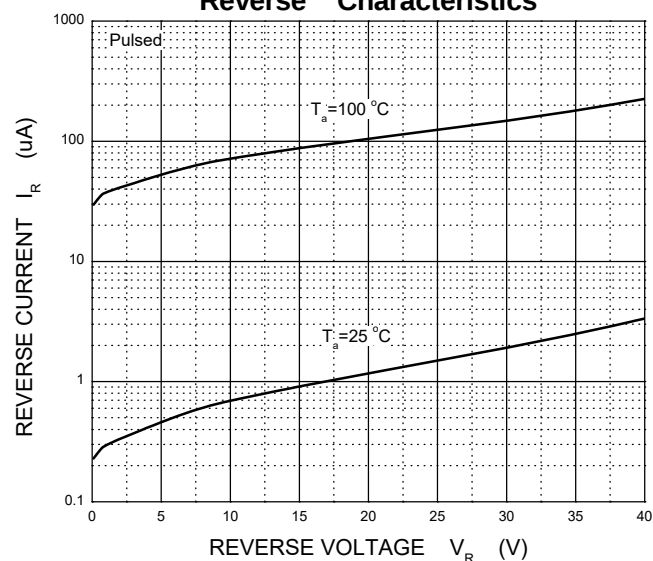
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$ SD103AW	40			V
		SD103BW	30			
		SD103CW	20			
Reverse current	I_R	$V_R=30\text{V}$ SD103AW			5	μA
		$V_R=20\text{V}$ SD103BW				
		$V_R=10\text{V}$ SD103CW				
Forward voltage	V_F	$I_F=20\text{mA}$			0.37	V
		$I_F=200\text{mA}$			0.6	
Total capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$		50		pF
Reverse recovery time	t_{rr}	$I_F=I_R=200\text{mA}, I_{rr}=0.1\times I_R, R_L=100\Omega$		10		ns

Typical Characteristics

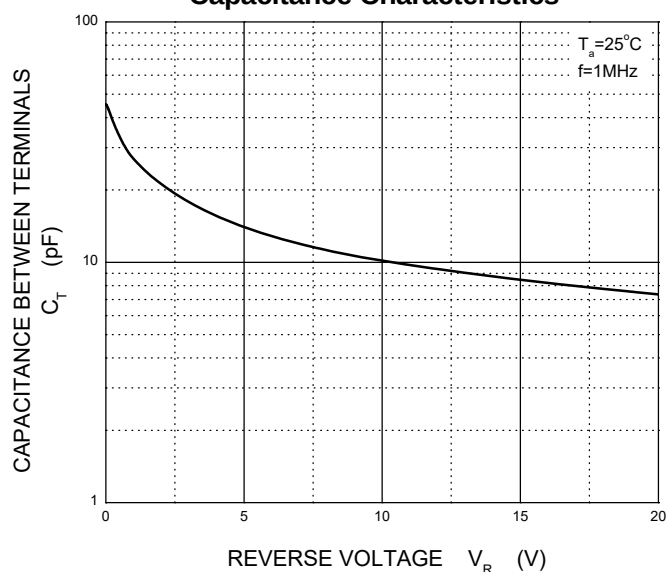
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

