

SOD-123 SCHOTTKY BARRIER DIODE

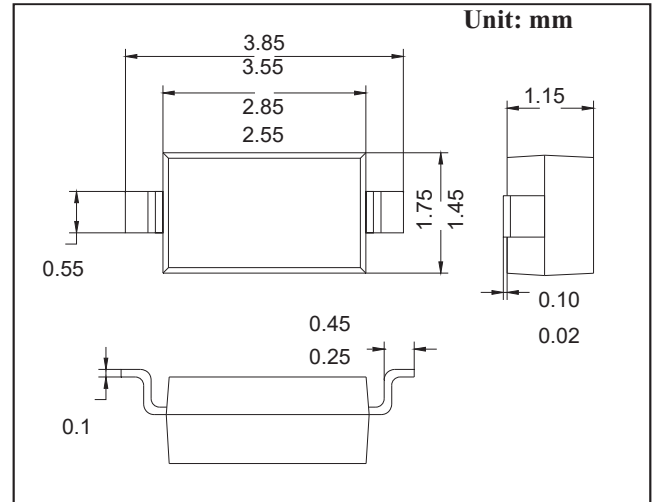
VOLTAGE RANGE: 20V-40V PEAK PULSE POWER:250mW

FEATURES

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

MECHANICAL DATA

- Case: SOD-123 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (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			°C/W
T_j	Junction Temperature	125			°C
T_{stg}	Storage Temperature	-55~+150			°C

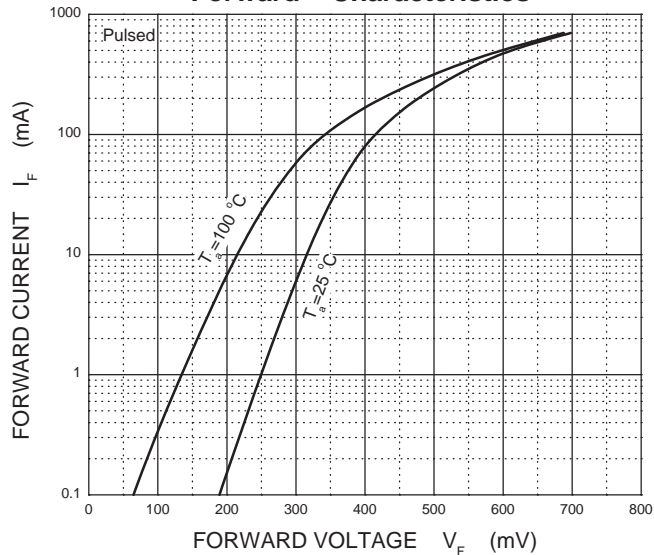
Electrical Specification (T_A=25°C unless otherwise specified)

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

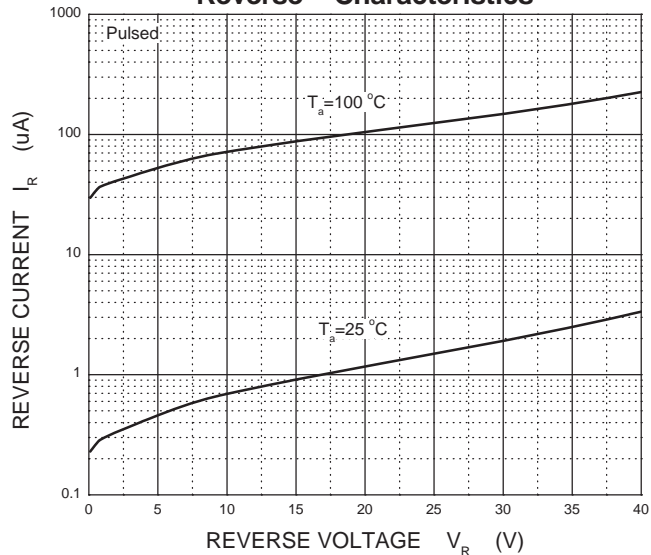
	SD103AW	SD103BW	SD103CW
MARKING:	S4	S5	S6

RATINGS AND CHARACTERISTIC CURVES

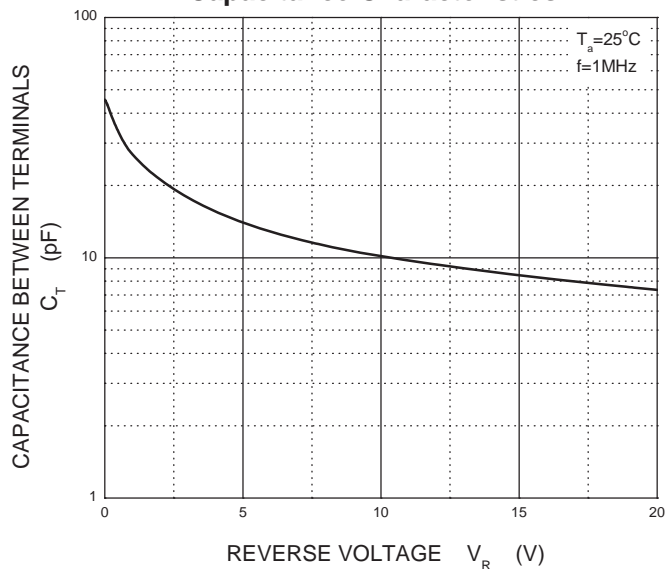
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

