

SCHOTTKY DIODES

Features

- ◆ Fast switching speed
- ◆ Guard ring construction for transient protection
- ◆ Negligible reverse recovery time
- ◆ low reverse capacitance

Mechanical Data

Case : JEDEC SOD-123 molded plastic body
 Terminals : Plated leads solderable per MIL-STD-750,
 Method 2026

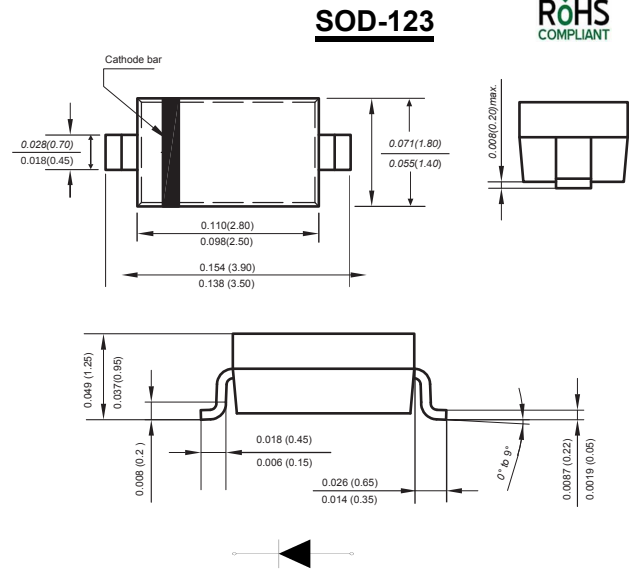
Polarity : Polarity symbols marked on case

Weight : 0.0007 ounce, 0.02 grams

Marking: SD103AW:S4, SD103BW:S5, SD103CW:S6

Absolute Maximum Ratings at 25 °C

PARAMETER	SYMBOLS	SD103AW	SD103BW	SD103CW	UNITS
Peak repetitive peak reverse voltage	V_{RRM}				
Working peak reverse voltage	V_{RWM}	40	30	20	VOLTS
DC Blocking voltage	V_{DC}				
RMS Reverse voltage	$V_{R(RMS)}$	28	21	14	V
Forward continuous current	I_{FM}	350			mA
Repetitive peak forward current at $\leq 1.0s$	I_{FRM}	1.5			A
Power dissipation	P_d	400			mW
Thermal resistance junction to ambient	$R_{\theta JA}$	300			°C/W
Junction temperature	T_j	-55 to +125			°C
Storage temperature	T_{STG}	-55 to +150			°C



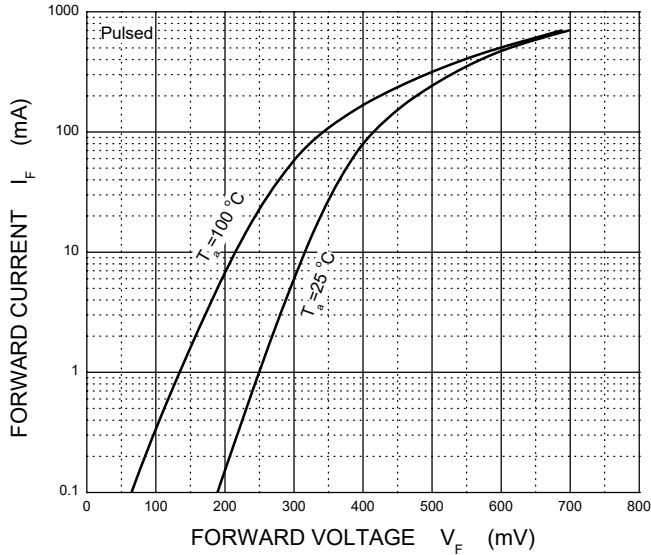
Dimensions in inches and (millimeters)

Characteristics at Ta= 25 °C

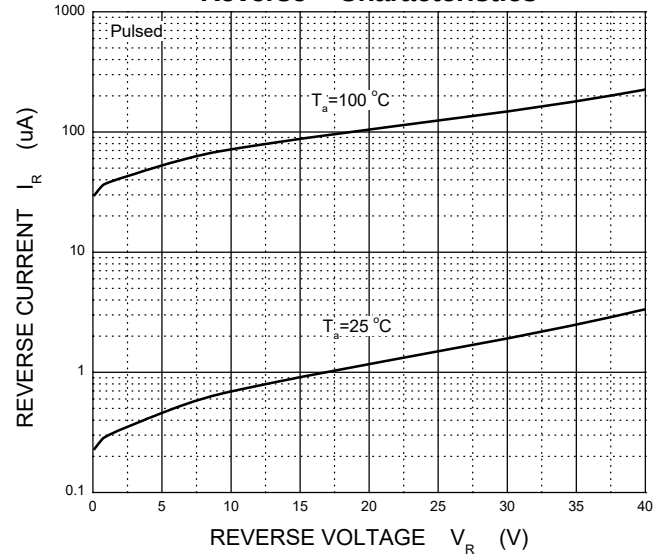
PARAMETER	SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)R}$	40			V	$I_R=100\mu A$
Reverse voltage		30			V	$I_R=100\mu A$
		20			V	$I_R=100\mu A$
Forward voltage	V_F			0.37 0.60	V	$I_F=20mA$ $I_F=200mA$
Reverse current	I_{RM}			5.0	μA	$V_R=30V$ $V_R=20V$ $V_R=10V$
Capacitance between terminals	C_T		50		pF	$V_R=0V, f=1.0MHz$
Reverse recovery time	t_{rr}		10		ns	$I_F=I_R=200mA$ $I_{rr}=0.1 \times I_R, R_L=100 \Omega$

Typical Characteristics

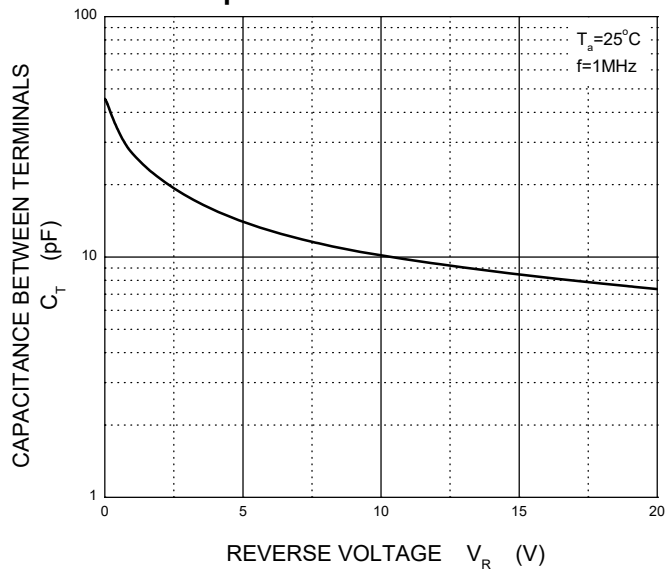
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

