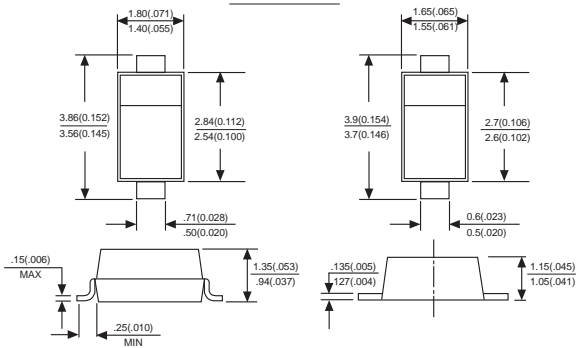




SD103AW-SD103CW

SCHTTKY DIODES

SOD-123



FEATURES

- ◆ Low forward voltage drop
- ◆ Guard ring construction for transient protection
- ◆ Negligible reverse recovery time
- ◆ low reverse capacitance

MECHANICAL DATA

Case: Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbols marked on case

Mounting Position: Any

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum ratings and electrical characteristics, Single diode @ $T_A=25^\circ\text{C}$

PARAMETER	SYMBOLS	SD103AW	SD103BW	SD103CW	UNITS
Peak repetitive peak reverse voltage	V_{RRM}				VOLTS
Working peak reverse voltage	V_{RWM}	40	30	20	
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 @ $t \leq 1.0s$	I_{FRM}		1.5		A
Power dissipation	P_d		400		mW
Thermal resistance junction to ambient	$R_{\theta JA}$		300		$^\circ\text{C}/\text{W}$
Storage temperature	T_{STG}		-65 to +125		$^\circ\text{C}$

Electrical ratings @ $T_A=25^\circ\text{C}$

PARAMETER	SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	SD103AW SD103BW SD103CW	40 30 20			V	$I_R=100\mu\text{A}$ $I_R=100\mu\text{A}$ $I_R=100\mu\text{A}$
Forward voltage	V_F			0.37 0.60	V	$I_F=20\text{mA}$ $I_F=200\text{mA}$
Reverse current	SD103AW SD103BW SD103CW			5.0	μA	$V_R=30\text{V}$ $V_R=20\text{V}$ $V_R=10\text{V}$
Capacitance between terminals	C_T		50		pF	$V_R=0\text{V}, f=1.0\text{MHz}$
Reverse recovery time	t_{rr}		10		ns	$I_F=I_R=200\text{mA}$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

RATINGS AND CHARACTERISTIC CURVES SD103AW-SD103CW

FIG. 1- TYPICAL FORWARD CHARACTERISTICS

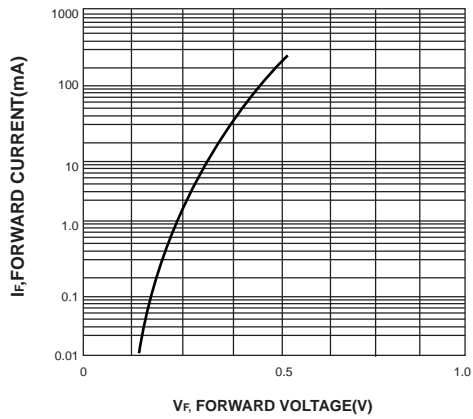


FIG. 2-TYP. JUNCTION CAPACITANCE VS REVERSE VOLTAGE

