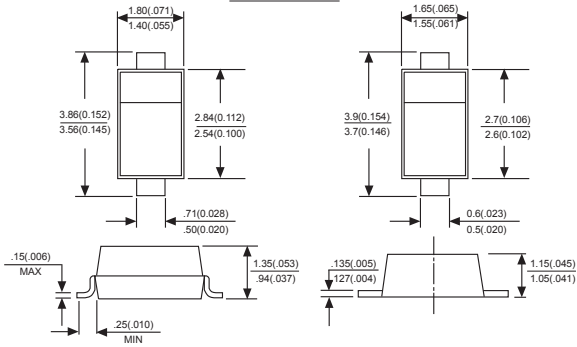


### SOD-123



Dimensions in millimeters and (inches)

### 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		$^\circ\text{C/W}$
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	$I_R=10\mu\text{A}$ $I_R=10\mu\text{A}$ $I_R=10\mu\text{A}$
Forward voltage	$V_F$			0.37 0.60	V	$I_F=20\text{mA}$ $I_F=20\text{mA}$
Reverse current	SD103AW SD103BW SD103CW			5.0	$\mu\text{A}$	$V_R=30\text{V}$ $V_R=20\text{V}$ $V_R=10\text{V}$
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

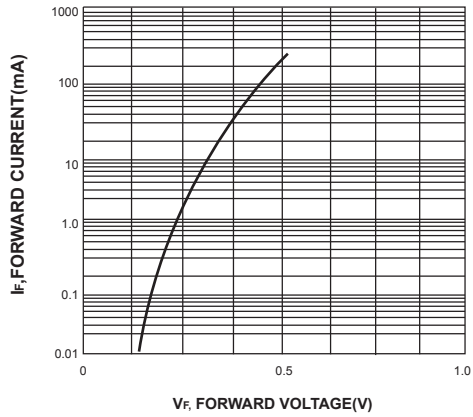


FIG. 2-TYP. JUNCTION CAPACITANCE VS REVERSE VOLTAGE

