

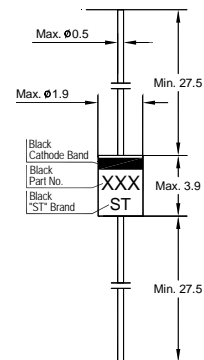
# SD103A...SD103C

## SILICON SCHOTTKY BARRIER DIODES

### for general purpose applications

The SD103A, B, C is a metal on silicon Schottky barrier device which is protected by a PN junction guard ring. The low forward voltage drop and fast switching make it ideal for protection of MOS devices, steering, biasing and coupling diodes for fast switching and low logic level applications. Other uses are for click suppression, efficient full wave bridges in telephone subsets, and as blocking diodes in rechargeable low voltage battery system.

This diode is also available in MiniMELF case with type designation LL103A, B, C.



Glass Case DO-35  
Dimensions in mm

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RRM}$	SD103A SD103B SD103C	40 30 20
			V
Power Dissipation		$P_{tot}$	400 <sup>1)</sup>
			mW
Single Cycle Surge 60 Hz Sine Wave	$I_{FSM}$	15	A
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Storage Temperature Range	$T_{Stg}$	- 55 to + 175	$^\circ\text{C}$

<sup>1)</sup> Valid provided the leads direct at the case are kept at ambient temperature.

### Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Typ.	Max.	Unit
Forward Voltage	$V_F$			
at $I_F = 20\text{ mA}$		-	0.37	V
at $I_F = 200\text{ mA}$	$V_F$	-	0.6	V
Reverse Leakage Current	$I_R$	-	5	$\mu\text{A}$
at $V_R = 30\text{ V}$				
at $V_R = 20\text{ V}$				
at $V_R = 10\text{ V}$				
Junction Capacitance	$C_{tot}$	50	-	pF
at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$				
Reverse Recovery Time	$t_{rr}$	10	-	ns
at $I_F = I_R = 5\text{ mA}$ to $200\text{ mA}$ , recover to $0.1 I_R$				

