



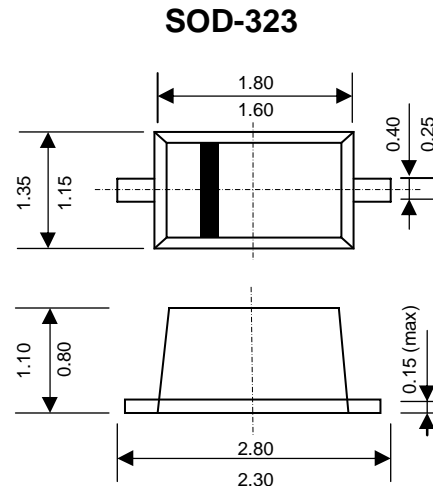
THE DATASHEET OF SD103AWS



SCHOTTKY BARRIER DIODES

FEATURES :

- * For general purpose applications
- * The SD103 series 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.
- * These diodes are also available in the MiniMELF case with type designations LL103A thru LL103C.



Dimensions in millimeters

Maximum Ratings and Thermal Characteristics (T_C = 25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	SD103AWS	40	V
	SD103BWS	30	
	SD103CWS	20	
Maximum Single Cycle Surge 10 μs Square Wave	I _{FSM}	2	A
Power Dissipation (Infinite Heat Sink)	P _{tot}	150 ⁽¹⁾	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	650 ⁽¹⁾	°C/W
Junction Temperature	T _J	125 ⁽¹⁾	°C
Storage temperature range	T _{STG}	-55 to + 150	°C

Electrical Characteristics (T_J = 25°C unless otherwise noted)

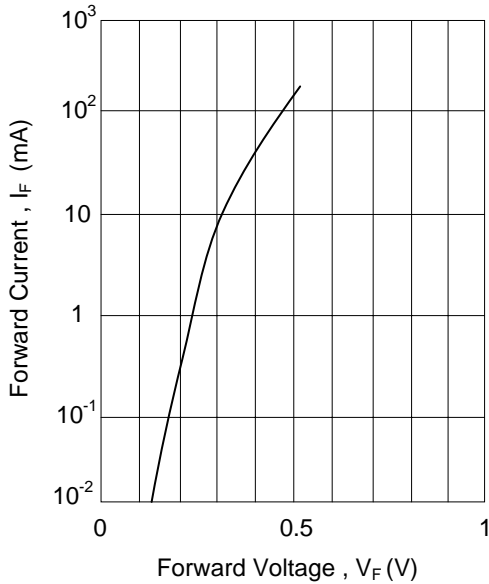
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Current	SD103AWS	V _R = 30 V	-	-	5	μA
	SD103BWS	V _R = 20 V	-	-	5	
	SD103CWS	V _R = 10 V	-	-	5	
Forward Voltage Drop	V _F	I _F = 20mA	-	-	0.37	V
		I _F = 200mA	-	-	0.60	
Junction Capacitance	C _{tot}	V _R = 0 V, f = 1MHz	-	50	-	pF
Reverse Recovery Time	T _{rr}	I _F = I _R = 50mA to 200mA recover to 0.1I _R	-	10	-	ns

Note:

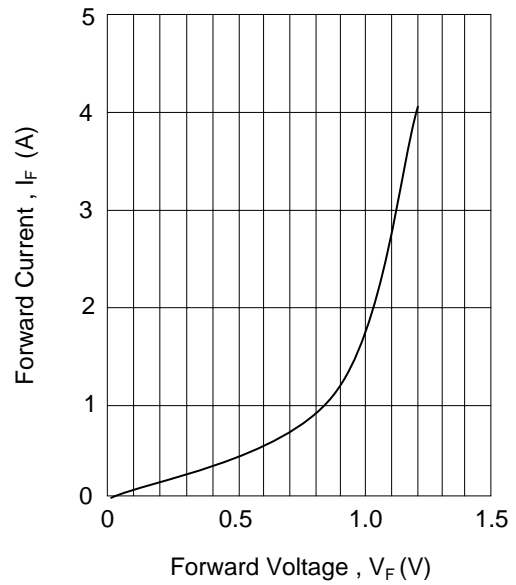
(1) Valid provided that electrodes are kept at ambient temperature.

RATING AND CHARACTERISTIC CURVES (SD103AWS - SD103CWS)

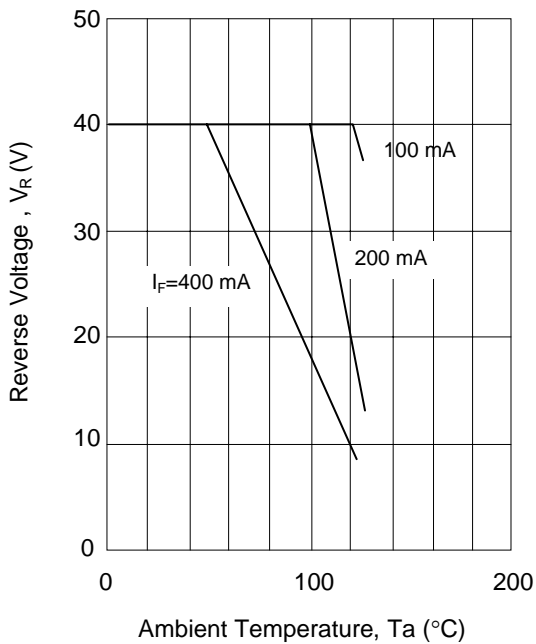
Typical variation of forward current vs. forward voltage for primary conduction through the schottky barrier



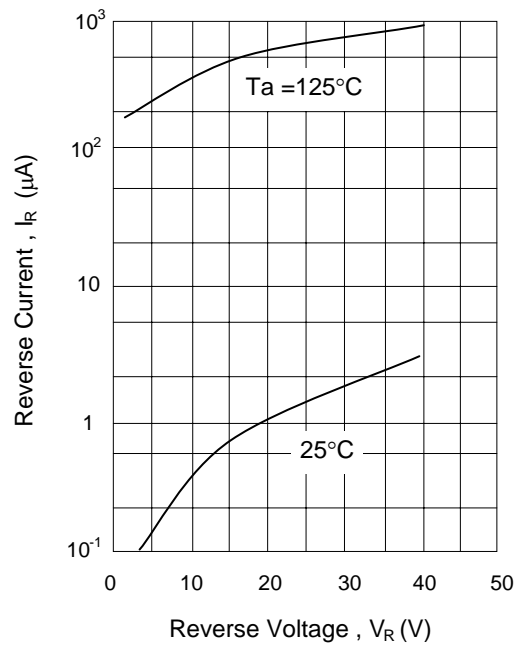
Typical high current forward conduction curve
 $t_p = 300ms$, duty cycle = 2%



Blocking voltage deration versus temperature at various average forward currents



Typical variation of reverse current at various temperatures



Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View SD103AWS on WIN SOURCE](#)
- ⊖ [ShenZhen Silkormicro Semicon Co. Ltd Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management