

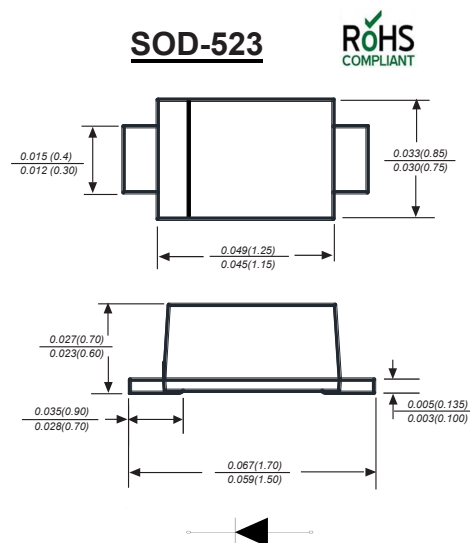
Schottky Barrier Diode

Features

- ◆ Low Forward Voltage
- ◆ High Current Capability

Mechanical Data

- ◆ Case : JEDEC SOD-523 molded plastic body
- ◆ Mounting Position : Any
- ◆ Marking;SD103AWT:S4



Dimensions in inches and (millimeters)

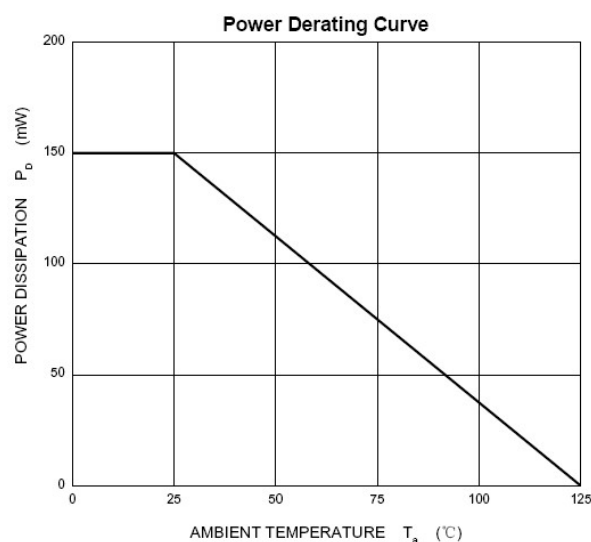
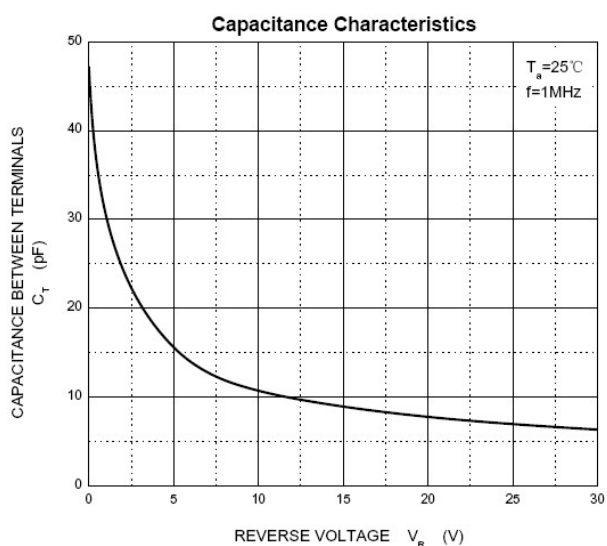
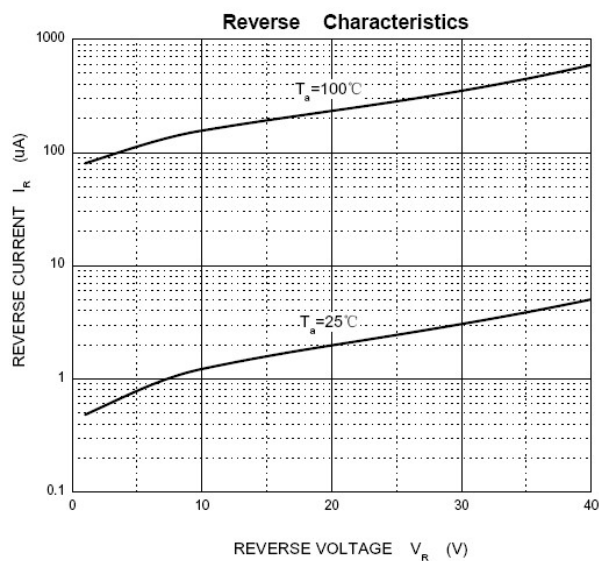
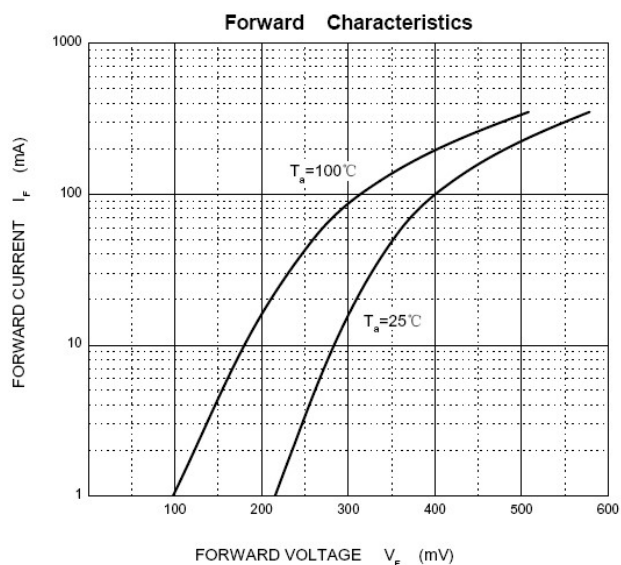
MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbols	SD103AWT	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC blocking voltage	V_{DC}	40	V
Maximum average forward rectified current	I_{FM}	350	mA
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	2	A
Power Dissipation	P_{tot}	150	mW
Typical Thermal Resistance	$R_{\theta JA}$	667	$^{\circ}\text{C}/\text{W}$
Operating junction temperature	T_j	125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-50 ~ +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbols	Test conditions	Min	Typ	Max	Units
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=100\mu\text{A}$	40			V
Maximum Forward Voltage	V_F	$I_F=1\text{mA}$ $I_F=5\text{mA}$ $I_F=20\text{mA}$ $I_F=200\text{mA}$		0.27 0.32	0.37 0.60	V
Peak Reverse Current	I_R	$V_R=30\text{V}$ $V_R=20\text{V}$ $V_R=10\text{V}$			5 2 1	μA
Typical Junction Capacitance	C_j	$V_R=0\text{V}, f=1\text{MHz}$		50		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=200\text{mA}$, $I_{rr}=0.1 \times I_R, R_L=100\Omega$		10		ns

Typical Characteristics



The curve above is for reference only.