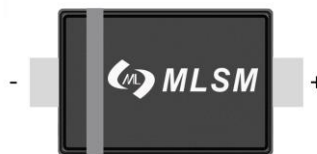


Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Reverse Recovery Time
- Low Reverse Capacitance



SOD-523 top view



Schematic diagram



Marking and pin assignment



Halogen-Free

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_R	DC Blocking Voltage	40	V
V_{RRM}	Working Peak Reverse Voltage		
V_{RWM}	DC Blocking Voltage		
I_{FM}	Forward Continuous Current	350	mA
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I_{FSM}	Non-Repetitive Peak Forward Surge Current @t=8.3ms	2	A
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	667	°C/W
T_J	Operating Junction Temperature Range	-40~ +125	°C
T_{STG}	Operating and Storage Temperature Range	-55~ +150	°C

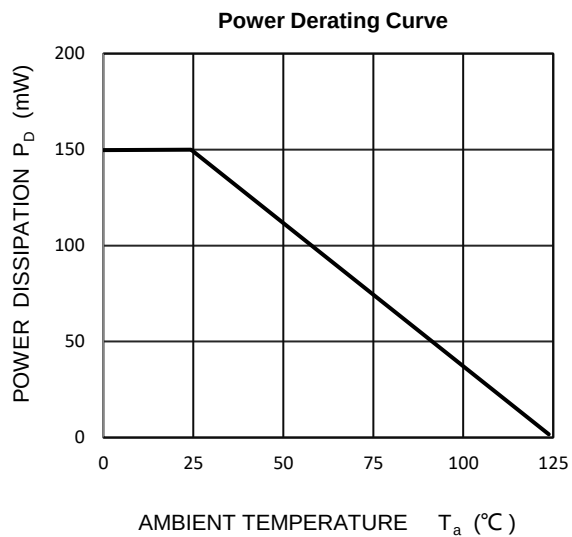
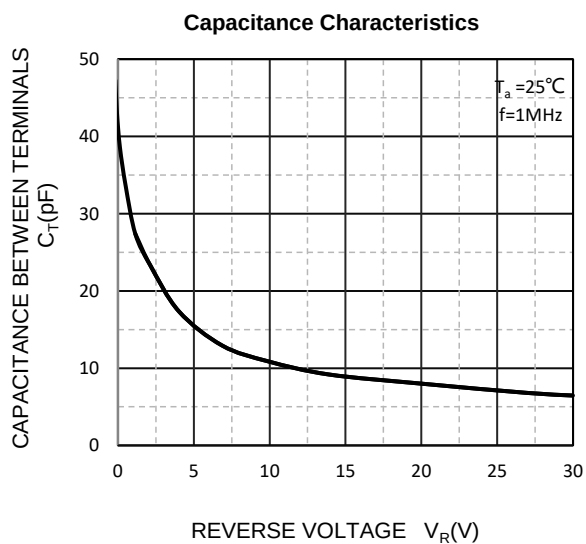
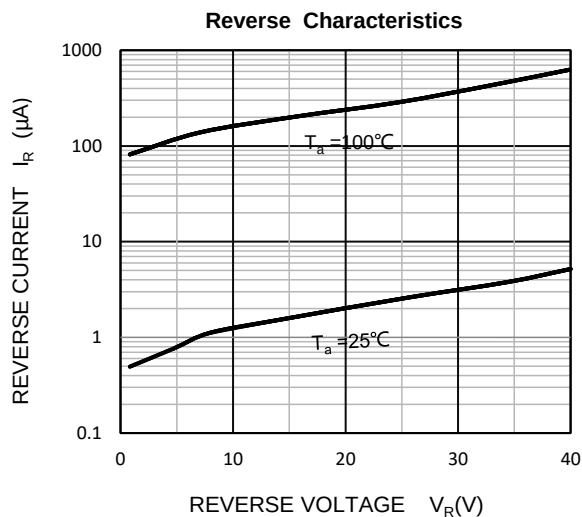
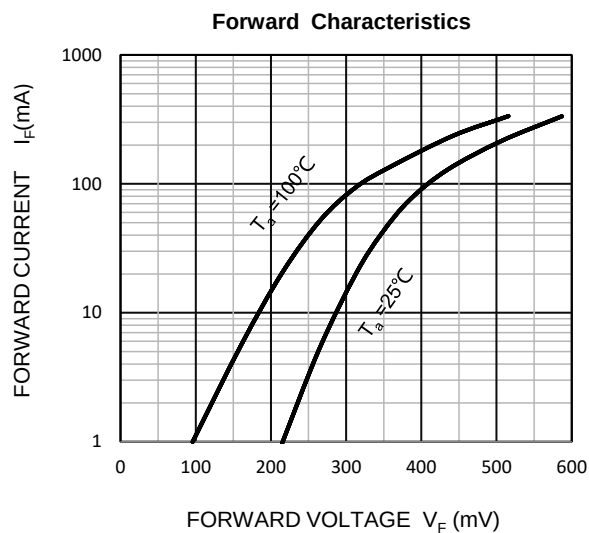
ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage	$I_R=100mA$	40	--	--	V
I_R	Reverse current	$V_R=30V$	--	--	5	μA
		$V_R=20V$	--	--	2	
		$V_R=10V$	--	--	1	
V_F	Forward voltage	$I_F=1mA$	--	--	0.27	V
		$I_F=5mA$	--	--	0.32	
		$I_F=20mA$	--	--	0.37	
		$I_F=200mA$	--	--	0.6	
C_T	Capacitance between terminals	$V_R=0V, f=1MHz$	--	50	--	pF
t_{rr}	Reverse recovery time	$I_F=I_R=200mA, I_R=0.1I_R, R_L=100\Omega$	--	10	--	ns

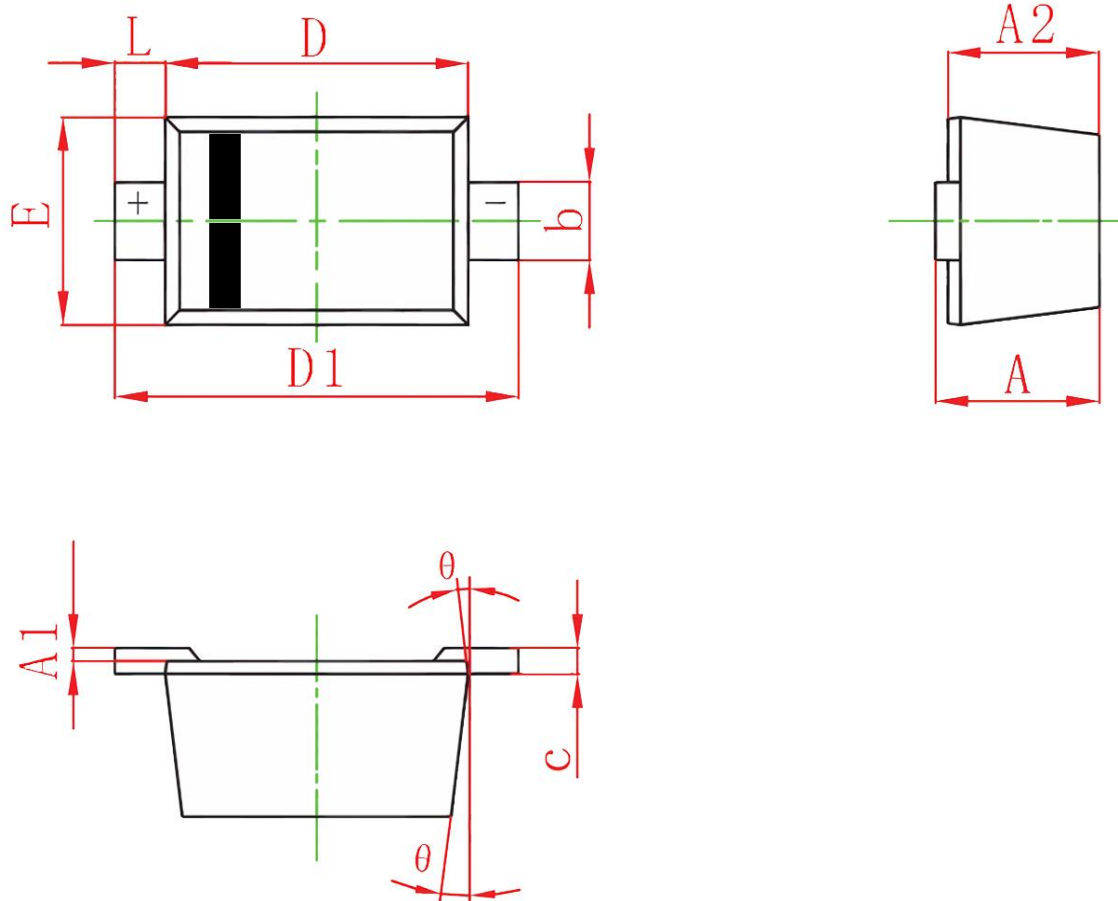
Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
SD103AX	SOD-523	S4	3,000	45,000	180,000	7"reel

Typical Operating Characteristics



SOD-523 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.030
A1	0.010	0.070	0.000	0.003
A2	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.100	1.300	0.043	0.051
D1	1.500	1.700	0.059	0.067
E	0.750	0.850	0.030	0.033
L	0.200 REF		0.008 REF	
θ	7°REF		7°REF	