

SWITCHING DIODE

Features

- Fast switching diode
- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance

Mechanical Characteristics

- Case: SOD-523 plastic case
- Tape Reel: 3000pcs

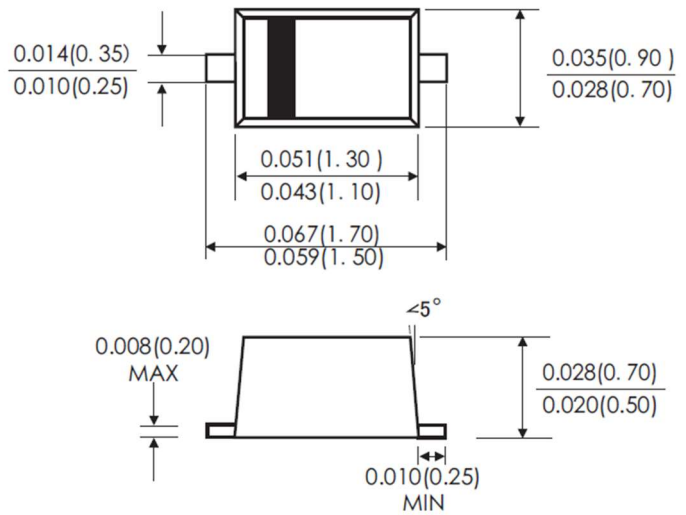
Applications

- High-speed switching
- General-purpose switching

Marking information

- Marking: A

SOD-523



Dimensions in inches and (millimeters)

Absolute Maximum Ratings (T=25°C, unless otherwise noted)

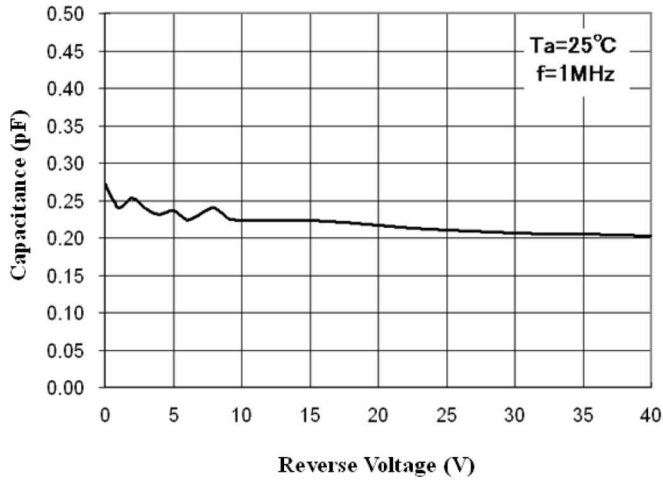
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
DC Reverse Voltage	V_R	80	V
Average rectified output current	$I_{O(AV)}$	100	mA
Maximum peak forward current	I_{FM}	200	mA
Peak Forward Surge Current (Pulse Width=1s)	I_{FSM}	500	mA
Power Dissipation	P_D	200	mW
Operating Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

Electrical Characteristics (T=25°C, unless otherwise noted)

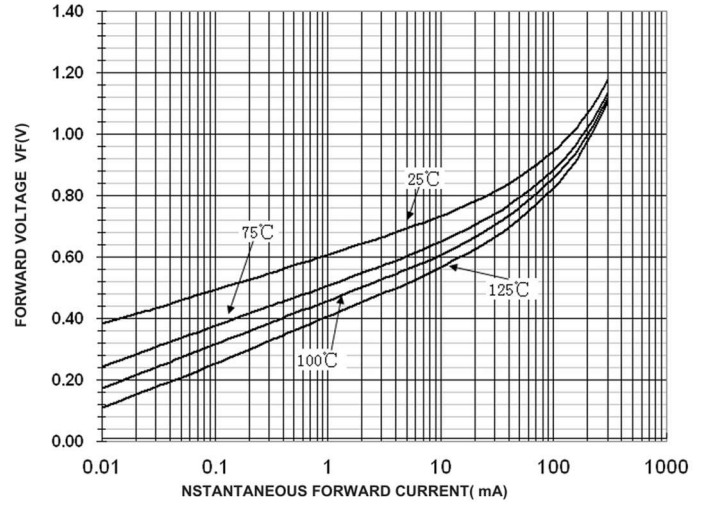
Parameter	Symbol	Test Condition	Min	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 100\mu A$	100		V
Reverse Leakage Current	I_R	$V_R = 80V$		0.1	μA
Forward Voltage	V_F	$I_F = 100mA$		1.2	V
Total Capacitance	C_T	$V_R = 0.5V, f = 1.0MHz$		3	pF
Reverse Recovery Time	t_{rr}	$I_F = 10mA,$ $V_R = 6V, R_L = 100\Omega$		4	ns

Typical Characteristics

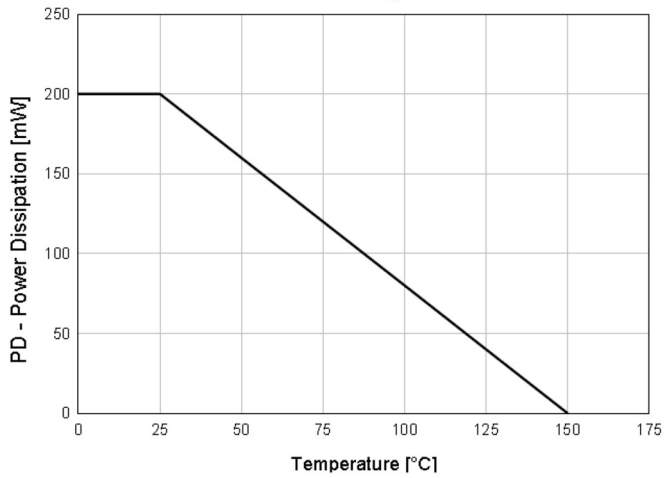
Total Capacitance



Forward Voltage vs Ambient Temperature



Power Derating Curve



Reverse Current vs Reverse Voltage

