

Plastic-Encapsulate Diodes

SWITCHING DIODE

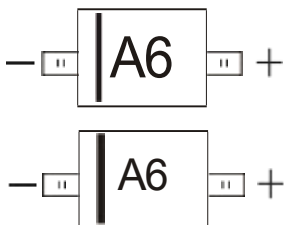
FEATURES

- Very Small Plastic Package
- High Switching Speed

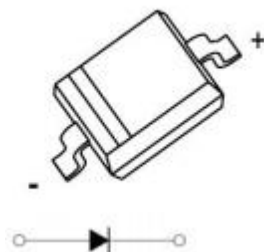
APPLICATIONS

- High-Speed Switching in e.g. Surface Mounted Circuits

MARKING: A6 *



SOD-123



The marking bar indicates the cathode
Solid dot = Green molding compound device,
if none, the normal device.

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

Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	85	V
V_R	DC Blocking Voltage	75	
I_o	Continuous Forward Current	250	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2.0	A
P_D	Power Dissipation	250	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	500	$^\circ\text{C/W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	100			V
Reverse current	I_R	$V_R=25\text{V}$			30	nA
		$V_R=75\text{V}$			1	μA
Forward voltage	V_F	$I_F=1\text{mA}$			0.715	V
		$I_F=10\text{mA}$			0.855	
		$I_F=50\text{mA}$			1	
		$I_F=150\text{mA}$			1.25	
Total capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$			1.5	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R$			4	ns

Typical Characteristics

