

## Plastic-Encapsulate Diodes

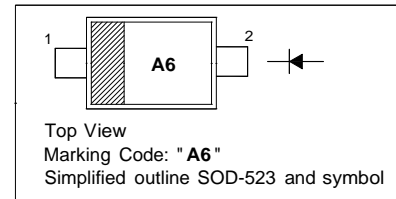
Switching Diode

### FEATURES

- High-Speed Switching Applications
- Lead Finish: 100% Matte Sn ( Tin )
- Qualified Reflow Temperature: 260 °C
- Extremely Small SOD-523 Package

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



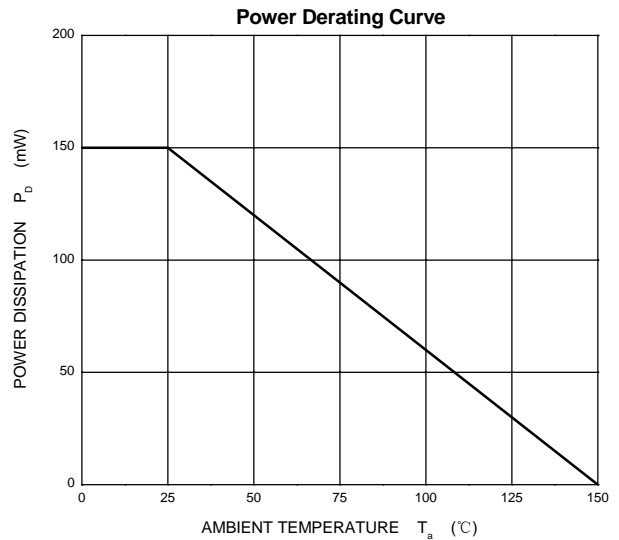
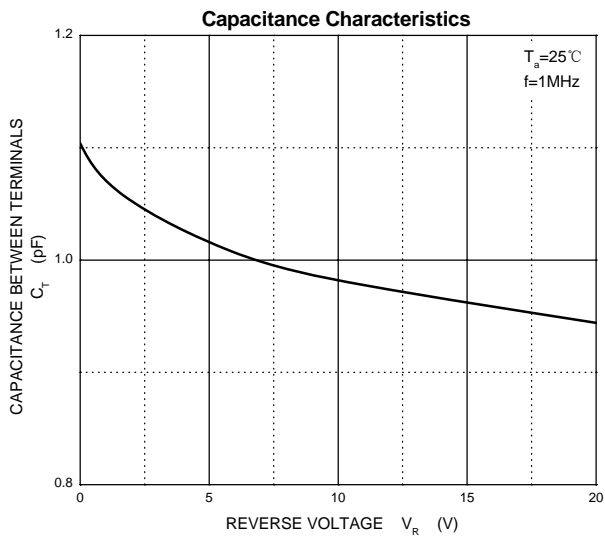
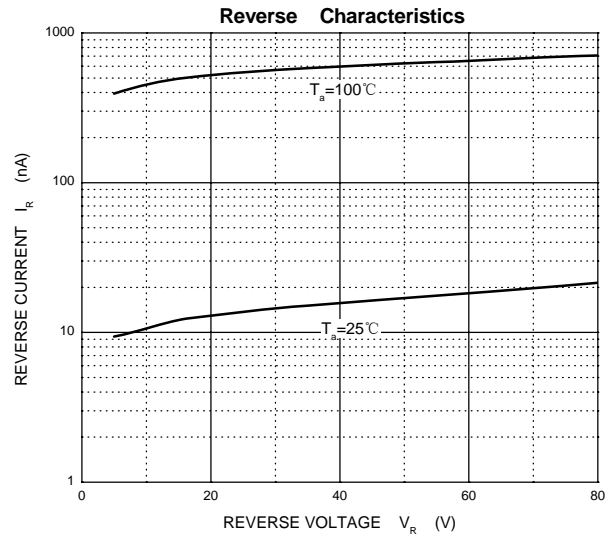
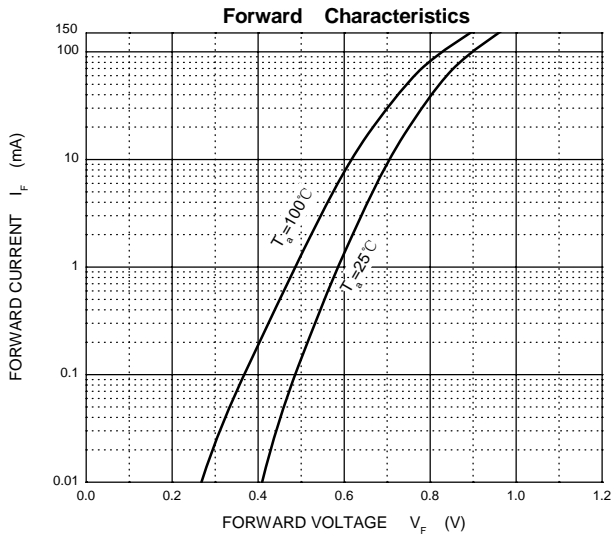
**MARKING: A6**

### Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Parameter	Symbol	Limit	Unit
DC Reverse Voltage	$V_R$	75	V
Forward Current	$I_F$	200	mA
Pak Forward Surge Current	$I_{FM(surge)}$	500	mA
Total Device Dissipation	$P_D$	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	833	°C/W
Junction and Storage Temperature	$T_j, T_{stg}$	150	°C

### Electrical Ratings @Ta=25°C

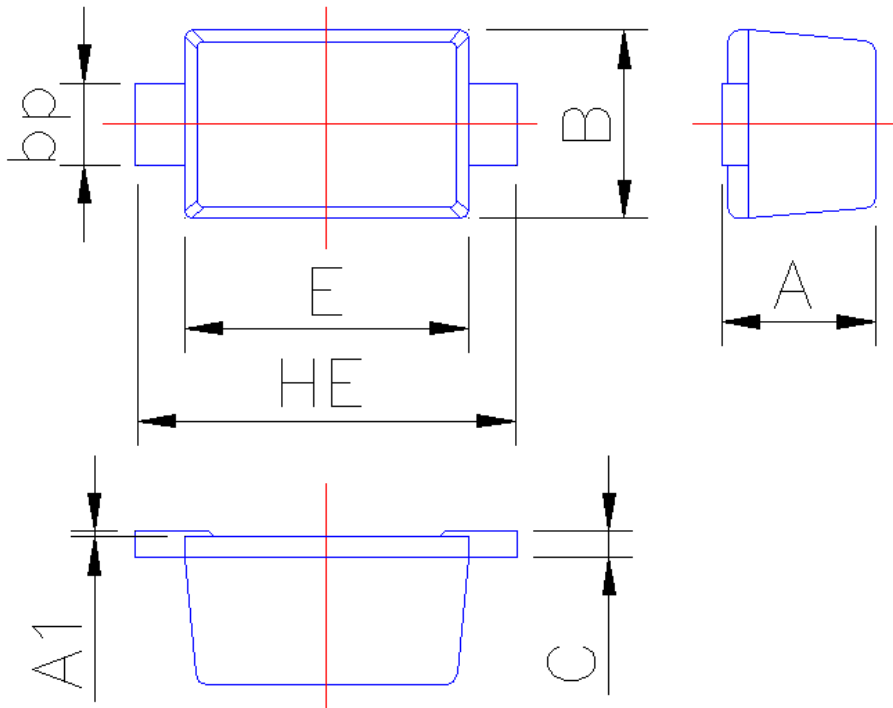
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	75				$I_R=100\mu A$
Forward voltage	$V_{F1}$			715	mV	$I_F=1mA$
	$V_{F2}$			855		$I_F=10mA$
	$V_{F3}$			1000		$I_F=50mA$
	$V_{F4}$			1250		$I_F=150mA$
Reverse recovery Time	$t_{rr}$			6.0	ns	$I_F=I_R=10mA_{dc}, R_L=50\Omega$
Reverse current	$I_R$			1.0	$\mu A$	$V_R=75V$
Forward recovery voltage	$V_{FR}$			1.75	V	$I_F=10mA, t_r=20ns$
Diode capacitance	$C_D$			2.0	pF	$V_R=0V, f=1MHz$
Stored charge	$Q_S$			45	pC	$I_F=10mA, V_R=5.0V, R_L=500\Omega$



### PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



Symbol	Dimension in Millimeters	
	Min	Max
A	0.60	0.70
A1	0	0.05
B	0.75	0.85
bp	0.25	0.40
C	0.09	0.15
E	1.15	1.25
HE	1.50	1.70