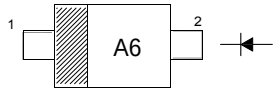
SOD-123 Plastic-Encapsulate Diodes

BAS16W Swithching Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: " A6 "
Simplified outline SOD-123 and symbol

FEATURES

- High-Speed Switching Applications
- Lead Finish: 100% Matte Sn (Tin)
- Qualified Reflow Temperature: 260 ℃
- Extremely Small SOD-123 Package

MARKING: A6

Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25℃

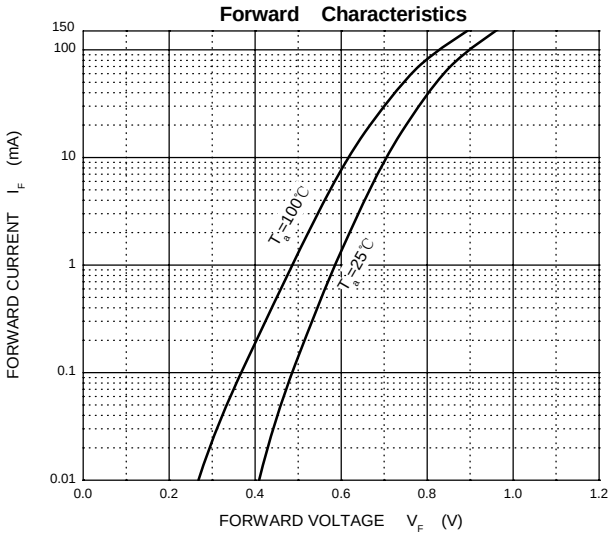
Parameter	Symbol	Limit	Unit
DC Reverse Voltage	V_R	75	V
Forward Current	I_F	200	mA
Pak Forward Surge Current	$I_{FM(surge)}$	500	mA
Total Device Dissipation	P_D	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	833	℃/W
Junction and Storage Temperature	T_j ,T_{stg}	150	℃

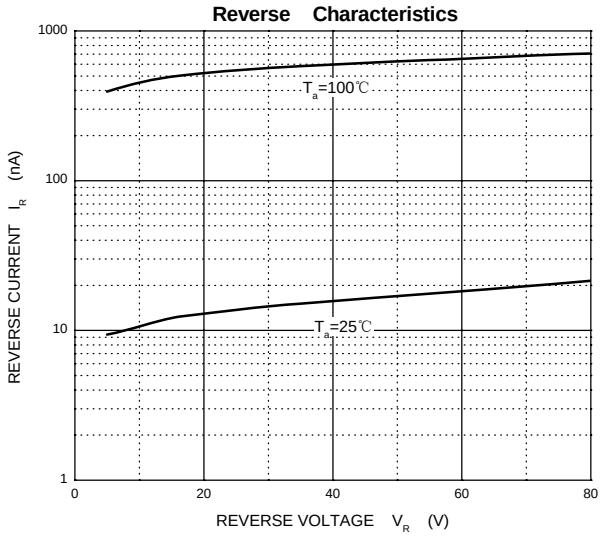
Electrical Ratings @Ta=25℃

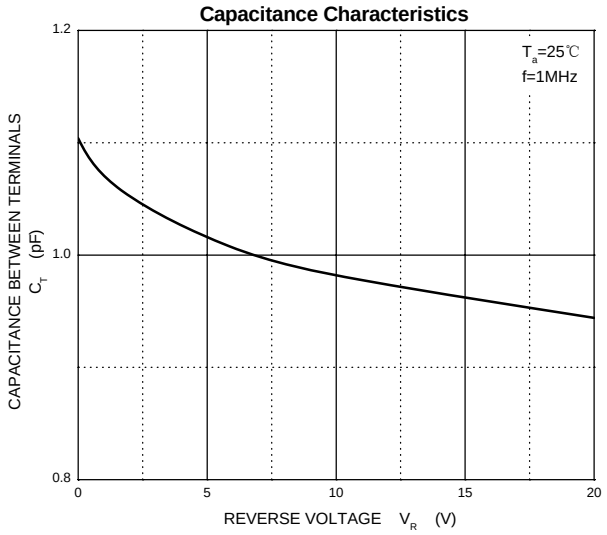
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	75				I_R=100uA
Forward voltage	V_{F1}			715	mV	I_F=1mA
	V_{F2}			855		I_F=10mA
	V_{F3}			1000		I_F=50mA
	V_{F4}			1250		I_F=150mA
Reverse recovery Time	t_{rr}			6.0	ns	I_F=I_R=10mAdc,R_L=50Ω
Reverse current	I_R			1.0	μ 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=500Ω

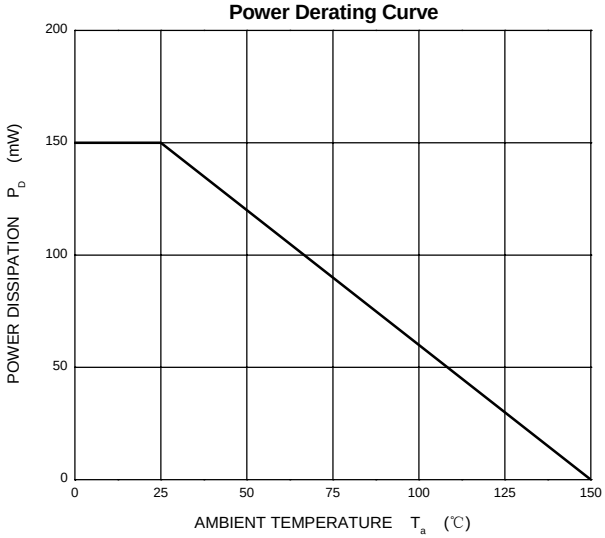
Typical Characteristics

BAS16W





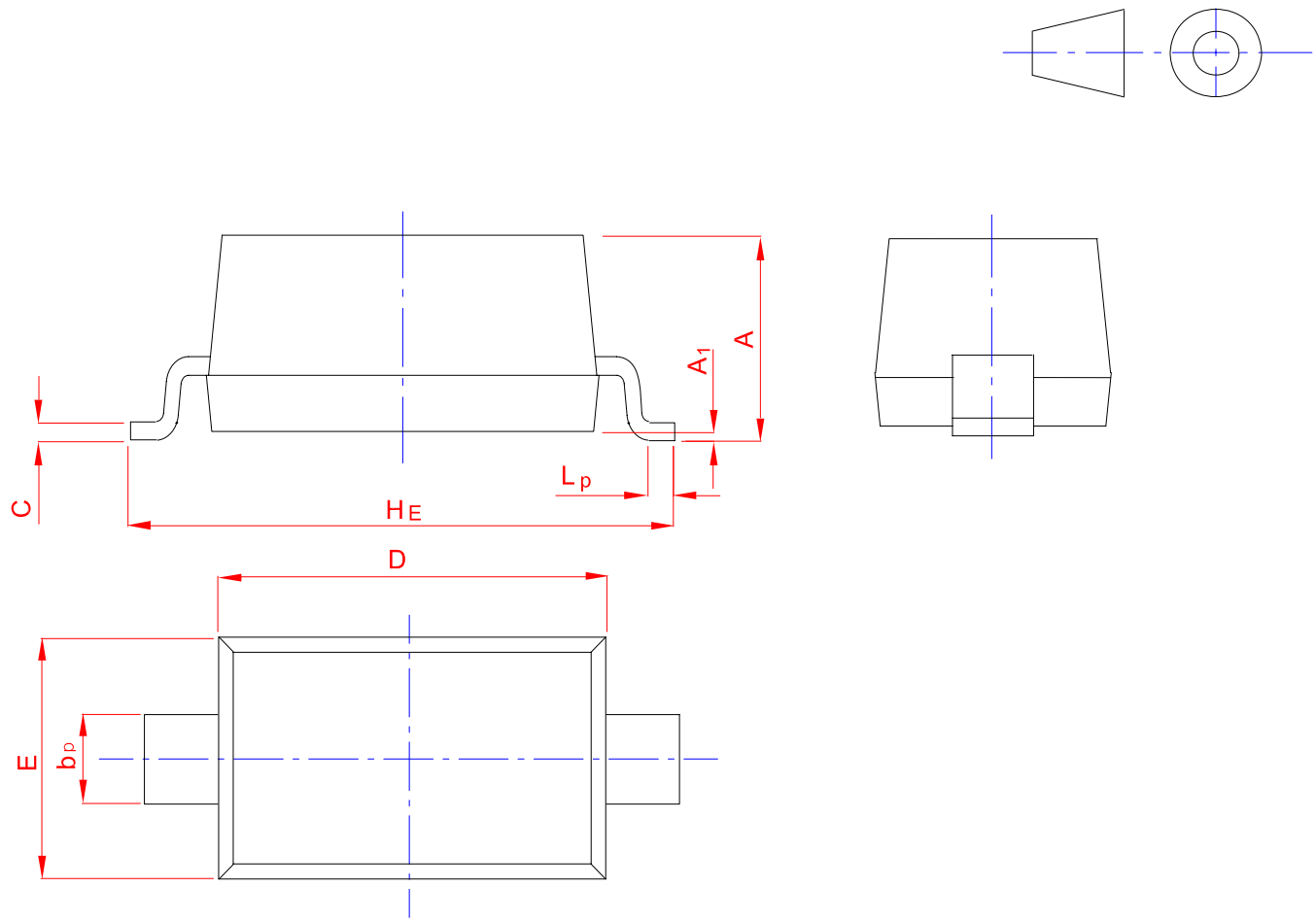




BAS16W

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-123**



UNIT	A	b_p	C	D	E	H_E	A_1	L_p
mm	1.20 0.90	0.60 0.50	0.135 0.100	2.75 2.55	1.65 1.55	3.85 3.55	0.10 0.01	0.50 0.20