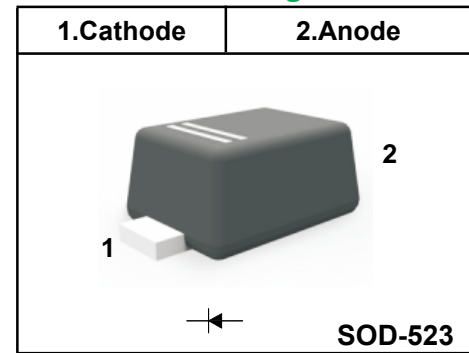


Plastic-Encapsulate Diodes

Switching Diode

Pinning



Marking Code

BAS16X	A6
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Features

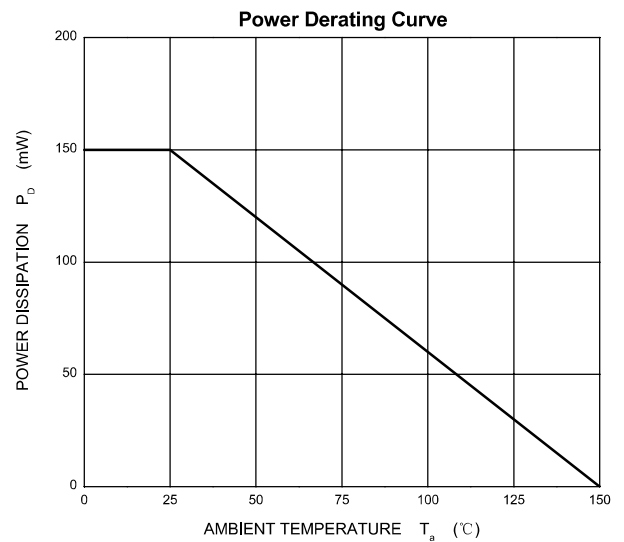
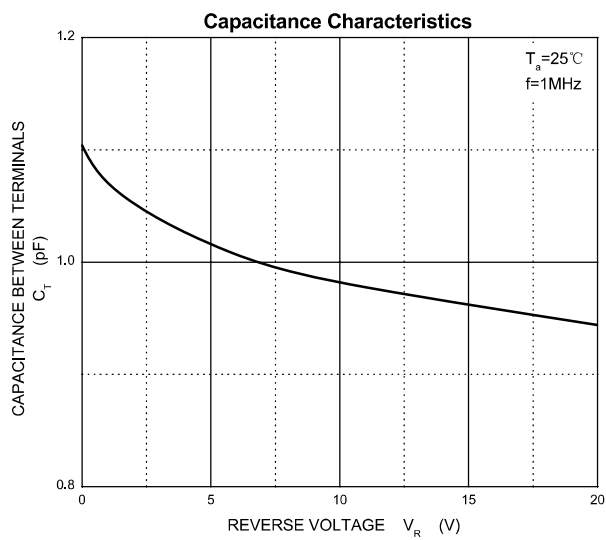
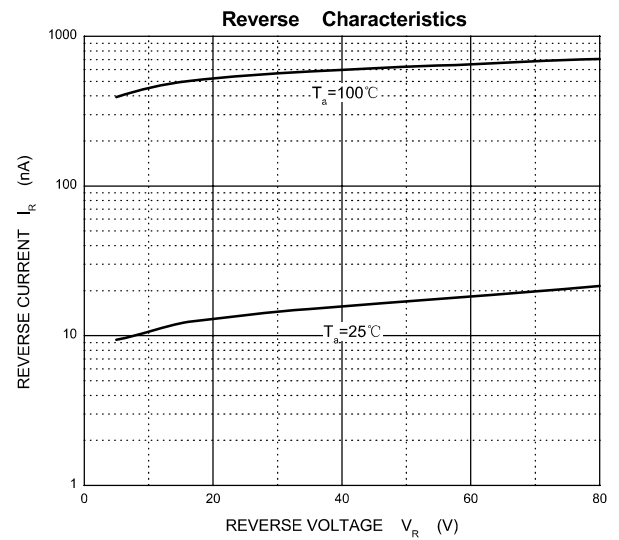
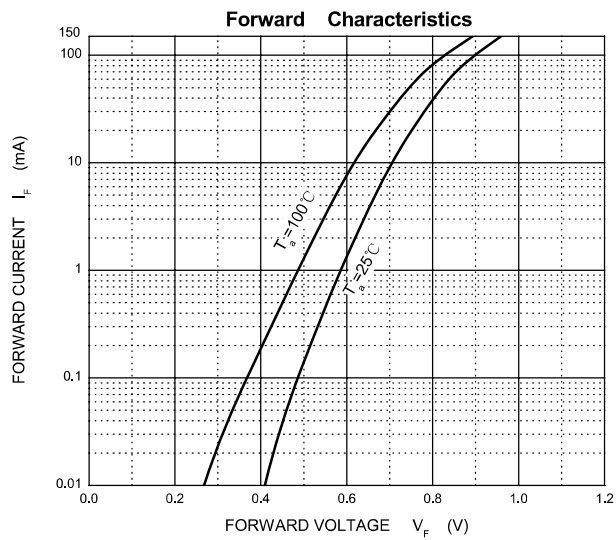
- High-Speed Switching Applications
- Lead Finish: 100% Matte Sn(Tin)
- Qualified Reflow Temperature: 260℃
- Extremely Small SOD-523 Package

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				$I_R=100\mu A$
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	μA	$V_R=75V$
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	$I_F=10mA, V_R=5.0V, R_L=500\Omega$



Ordering information

Package	Packing Description	Packing Quantity
SOD-523	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOD-523

Top view of the component. Dimension A is the height. HE is the total width. C is the thickness of the base. A note indicates 'ALL ROUND' for the corners.

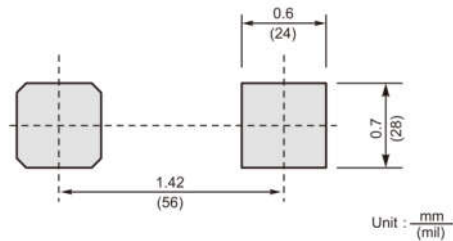
Side view of the component. Dimension A is the height. E is the width of the base. P is the radius of the top edge.

Bottom view of the component. Dimension D is the width of the main body. E is the height of the main body. e is the height of the base. L is the width of the base.

Bottom view of the component. Dimension N is the width of the main body. L is the width of the base. The text '底视图' and 'bottom view' are present.

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.51	0.77	20	30
e	0.25	0.35	10	14
C	0.08	0.15	3	6
D	1.10	1.30	43	51
E	0.75	0.99	30	39
HE	1.50	1.70	59	67
N	0.35ref		14ref	
L	0.2ref		8ref	
P	R0.1 ALL ROUND		R4.0 ALL ROUND	
∠	10°			

The recommended mounting pad size



Disclaimer

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