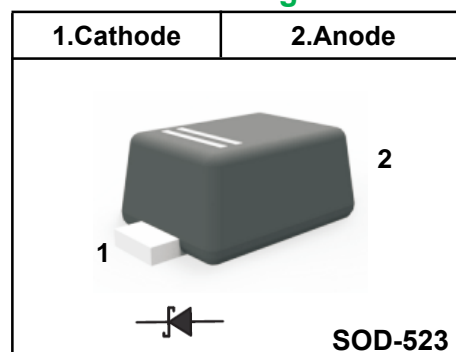


■Schottky Barrier Diode

- Low Forward Voltage Drop
- Fast Switching Time
- Surface Mount Package Ideally Suited for Automated Insertion
- Lead, Halogen and Antimony Free, RoHS Compliant "Green" Device

**Pinning**



**Marking Code**

BAS40WT	40
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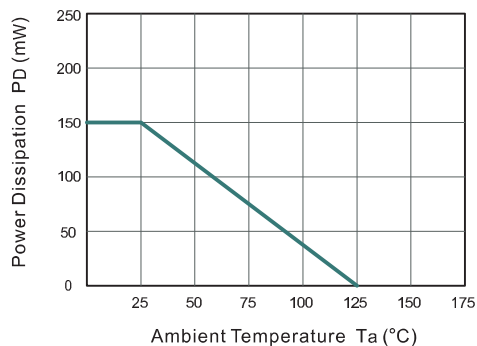
**Maximum Ratings and Electrical Characteristics**

**Ratings@25°C Ambient Temperature Unless Otherwise Specified.**

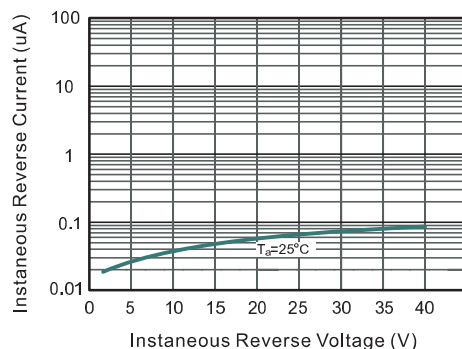
Parameter	Symbols	BAS40WT	Units
DC Reverse Voltage	$V_R$	40	V
Forward Continuous Current	$I_F$	200	mA
Power dissipation	$P_D$	150	mW
Breakdown Voltage	$I_R = 100\mu A$ $V_R$	40(Min)	V
Forward Voltage	$I_F = 1.0\text{ mA}$ $I_F = 40\text{ mA}$ $V_F$	0.38(Max) 1.00(Max)	V
Peak Reverse Current	$V_R = 30\text{ V}$ $I_R$	0.5(Max)	$\mu A$
Typical Junction Capacitance	$V_R = 0\text{ V}, f = 1\text{ MHz}$ $C_T$	5	pF
Reverse Recovery Time	$I_F = I_R = 5\text{ mA}$ $I_{rr} = 0.1 \times I_R$ $R_L = 100\Omega$ $t_{rr}$	5	ns
Junction Temperature	$T_j$	125	°C
Storage Temperature	$T_{stg}$	-55 ~ +150	°C

## Typical Characteristics

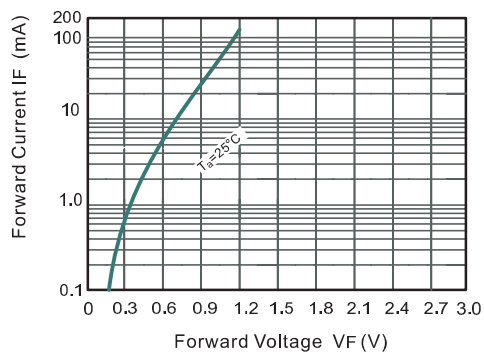
**Fig.1 Power Derating Curve**



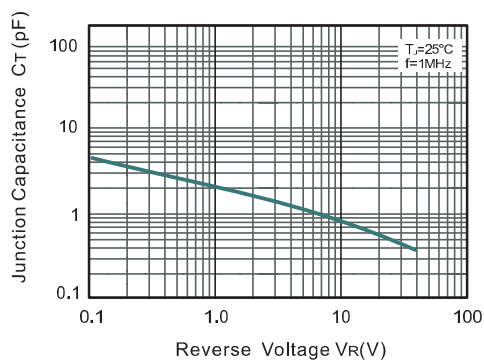
**Fig.2 Typical Instantaneous Reverse Characteristics**



**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



**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 of the main body. 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 of the main body. E is the width of the base. P is the radius of the top edge.

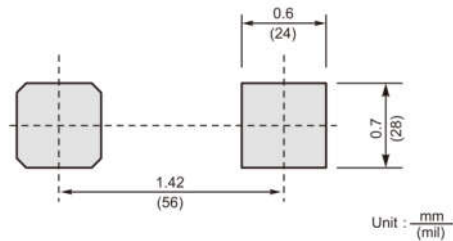
Bottom view of the component. Dimension D is the width of the main body. E is the height of the main body. e is the height of the base. L is the width of the base.

Bottom view of the component. Dimension N is the width of the main body. L is the width of the base.

底视图  
bottom view

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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