

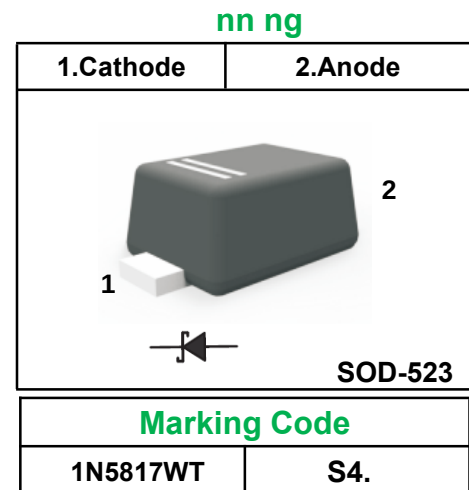
Plastic-Encapsulate Schottky Barrier Diode

Features

- ◆High Current Capability
- ◆Low Forward Voltage Drop

Mechanical Data

- ◆SOD-523 Small Outline Plastic Package
- ◆Polarity: Color band denotes cathode end
- ◆Mounting Position: Any



Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

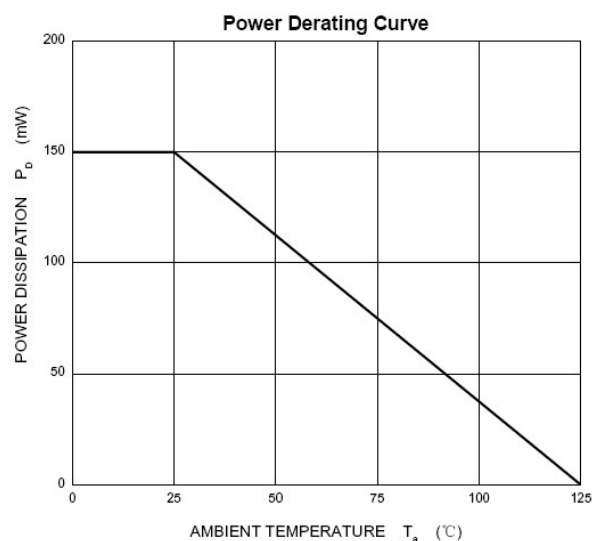
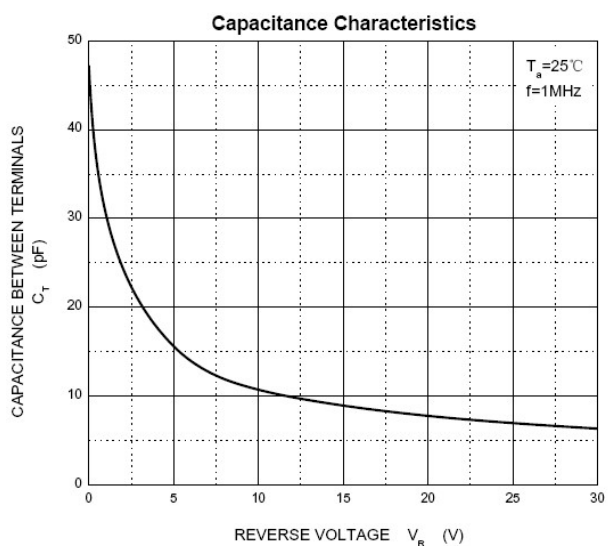
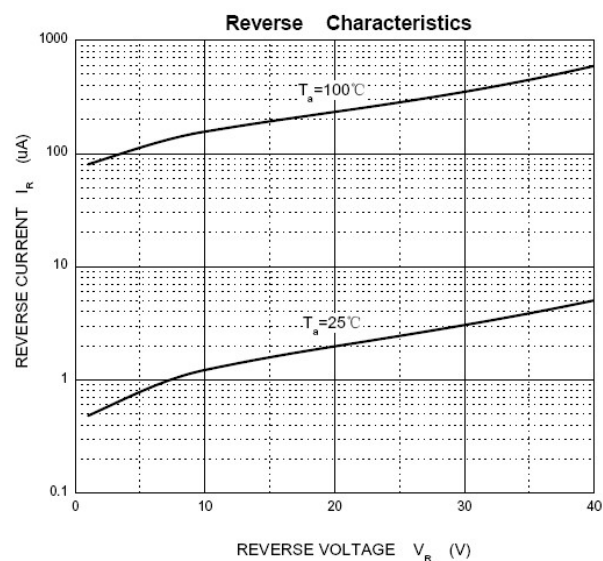
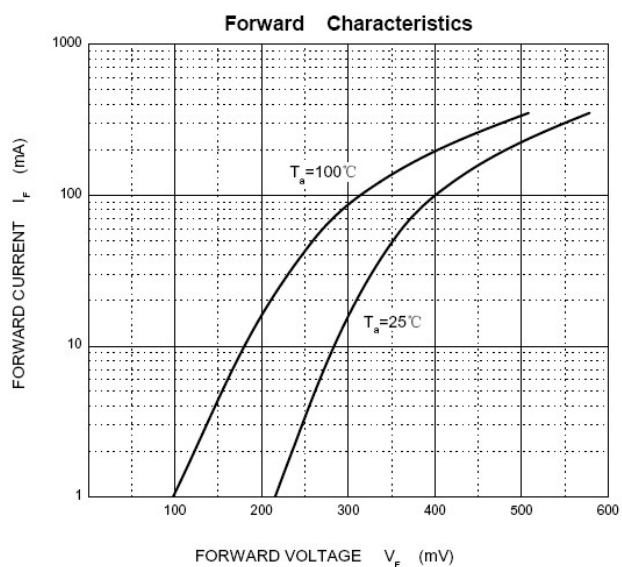
Parameters	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	V
Maximum RMS voltage	V_{RMS}	14	V
Maximum DC blocking voltage	V_{DC}	20	V
Maximum average forward rectified current	I_{FM}	350	mA
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	2	A
Power Dissipation	P_D	150	mW
Typical thermal resistance	$R_{\theta JA}$	667	°C/W
Operating junction temperature	T_j	125	°C
Storage temperature range	T_{STG}	-50-+150	°C

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified).

Parameters	Test conditions	Symbol	Min	TYP	Max	Unit
Maximum forward voltage	IF = 1mA IF = 5mA IF = 20mA IF = 200mA	V_F		0.27 0.32	0.37 0.60	V
Maximum reverse breakdown voltage	IR=100uA	V_R	20			V
Maximum reverse current	VR=30V VR=20V VR=10V	I_R			5 2 1	uA
Total capacitance	VR =0V, f = 1MHz	C_{tot}		50		pF
Reverse recovery time	IF=IR=200mA, Irr=0.1xIR,RL=100Ω	T_{rr}		10		ns

Characteristic Curves



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 length of the main body. 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 length of the main body. P is the radius of the top edge.

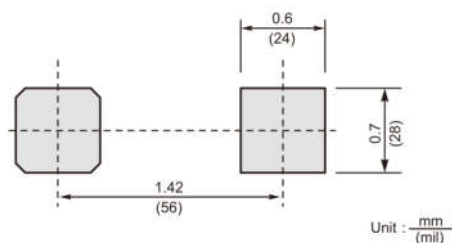
Bottom view of the component. Dimension D is the width of the main body. E is the length of the main body. e is the thickness of the main body. L is the length of the base.

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

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



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