

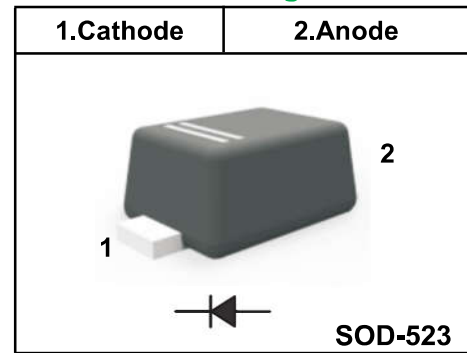
**Plastic-Encapsulate Diodes**

FAST SWITCHING DIODE

**FEATURES**

- ◆ Small Package
- ◆ Low Reverse Current
- ◆ Fast Switching Speed
- ◆ Surface Mount Package Ideally Suited for Automatic Insertion

**Pinning**



**Marking Code**

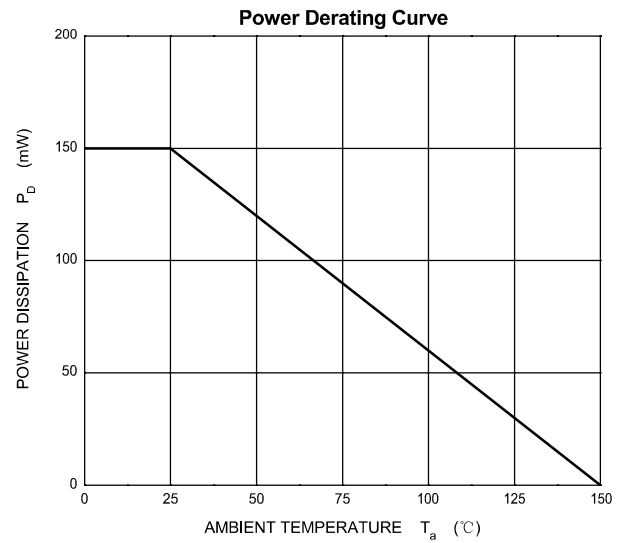
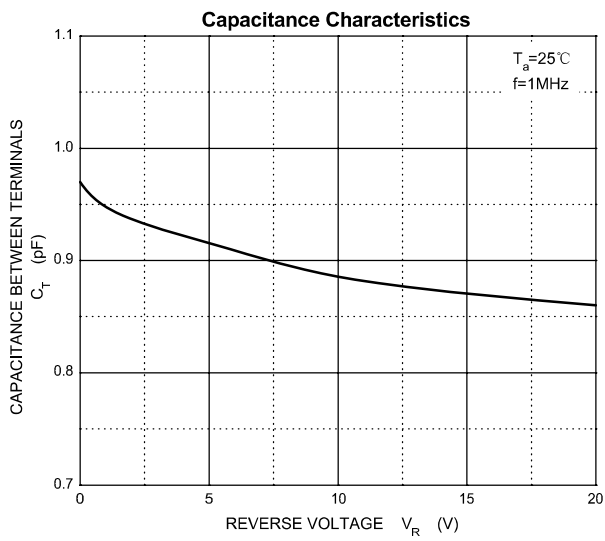
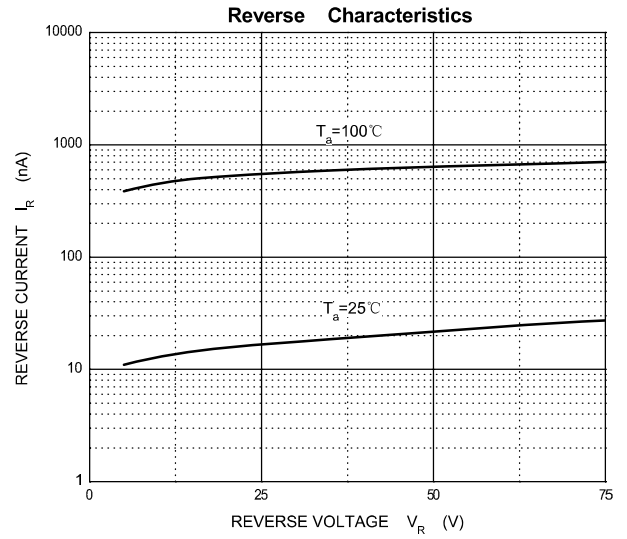
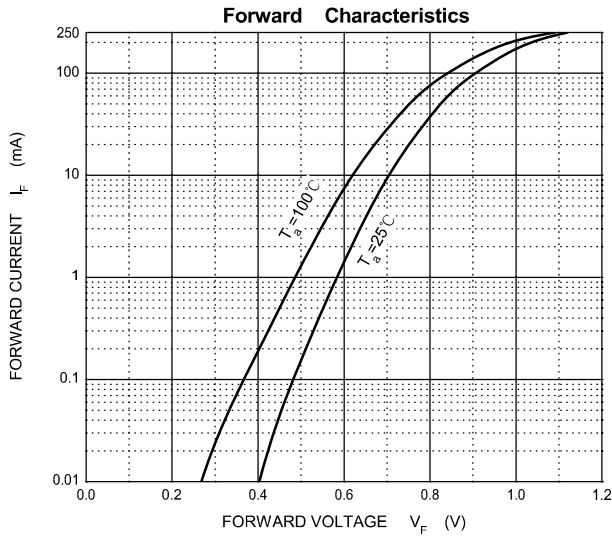
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**MAXIMUM RATINGS ( Ta=25°C unless otherwise noted )**

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	V
Working Peak Reverse Voltage	$V_{RWM}$		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Average Rectified Output Current	$I_o$	250	mA
Peak Forward Surge Current @t=1μs	$I_{FSM}$	4	A
Peak Forward Surge Current @t=1s		0.5	A
Power Dissipation	$P_D$	150	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	833	°C/W
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-55~+150	°C

**ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu A$	75			V
Reverse current	$I_R$	$V_R=25V$			30	nA
		$V_R=75V$			1	μA
Forward voltage	$V_F$	$I_F=1mA$			0.715	V
		$I_F=10mA$			0.855	V
		$I_F=50mA$			1	V
		$I_F=150mA$			1.25	V
Total capacitance	$C_{tot}$	$V_R=0V, f=1MHz$			1	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10mA, I_{tr}=0.1*I_R, R_L=100\Omega$			4	ns



**Ordering information**

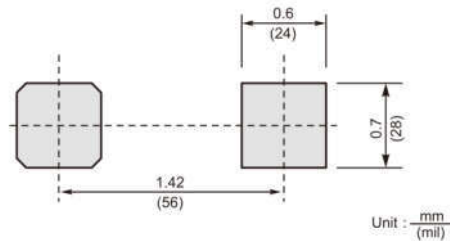
Package	Packing Description	Packing Quantity
SOD-523	Tape/Reel, 7"reel	3000PCS/Reel 120000PCS/Carton

**Package Dimensions**

**SOD-523**

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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