



## Features

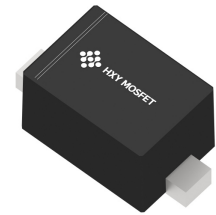
Ultra small mold type

Low  $V_F$

High reliability.

## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
RB521SM-40T2R	SOD-523	S	3000



SOD-523



## Maximum Ratings ( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

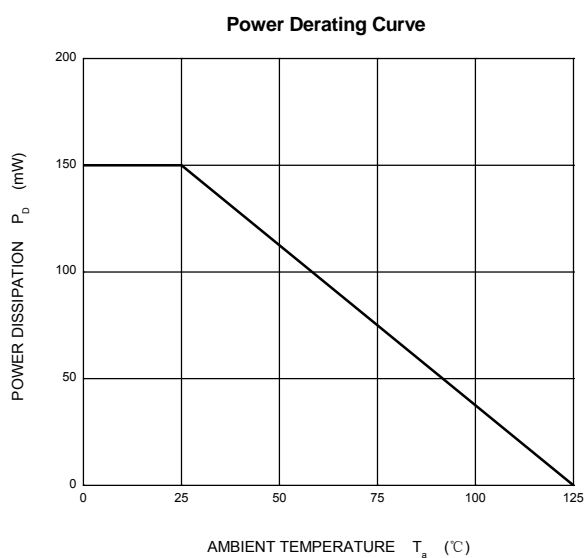
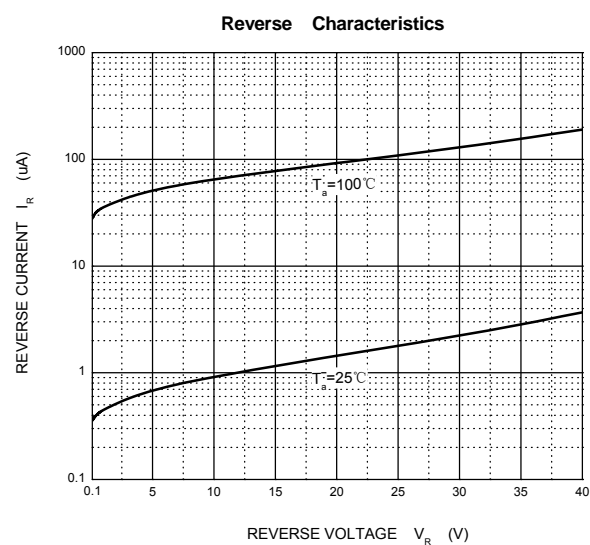
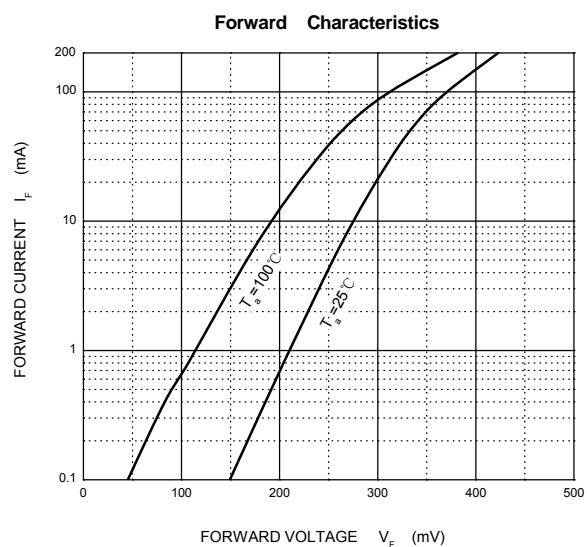
Symbol	Parameter	Value	Unit
$V_{RM}$	Non-repetitive peak reverse voltage	45	V
$V_{RRM}$	Peak repetitive reverse voltage	40	V
$V_{RWM}$	Working peak reverse voltage		
$V_{R(RMS)}$	RMS reverse voltage	28	V
$I_O$	Average rectified output current	200	mA
$I_{FSM}$	Non-repetitive peak forward surge current @ $t=8.3\text{ms}$	1	A
$P_D$	Power dissipation	150	mW
$R_{\theta JA}$	Thermal resistance from junction to ambient	667	$^{\circ}\text{C}/\text{W}$
$T_J$	Junction temperature	125	$^{\circ}\text{C}$
$T_{stg}$	Storage temperature	-55~+150	$^{\circ}\text{C}$

## Electrical Characteristics ( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=0.1\text{mA}$	40			V
Reverse current	$I_R$	$V_R=10\text{V}$			20	$\mu\text{A}$
		$V_R=40\text{V}$			90	
Forward voltage	$V_F$	$I_F=10\text{mA}$	0.16		0.3	V
		$I_F=100\text{mA}$	0.31		0.45	
		$I_F=200\text{mA}$	0.41		0.54	

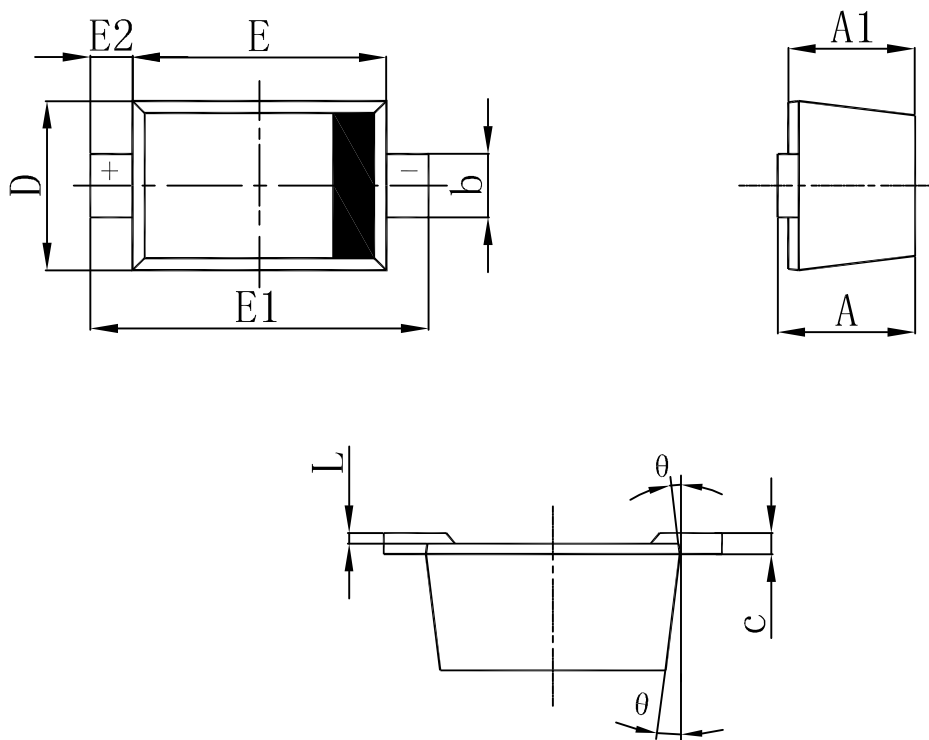


## Typical Characteristics





### SOD-523 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
$\theta$	7° REF		7° REF	



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