

#### **Features**

- Peak Forward Current: I<sub>FM</sub>=0.35A
- Power Dissipation of 400mw

## **Package Marking and Ordering Information**

Product ID	Pack	Marking	Qty(PCS)
B0520WS-7-F	SOD-323	SD	3000
B0530WS-7-F	SOD-323	SE	3000
B0540WS-7-F	SOD-323	SF	3000



**SOD-323** 



### Maximum Ratings (Ta=25°C unless otherwise noted)

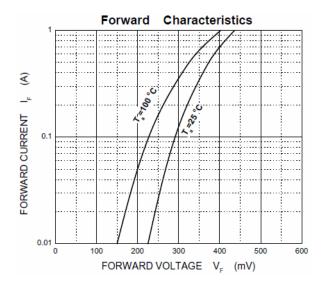
Parameter	Symbol	B0520WS-7-F	B0530WS-7-F	B0540WS-7-F	Unit
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$				
Working Peak Reverse Voltage	$V_{RWM}$	V <sub>RWM</sub> 20 30 40			
DC Blocking Voltage	$V_R$				
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Forward Continuous Current	I <sub>FM</sub>	350		mA	
Non-repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	1.5			Α
Power Dissipation	Pd	400			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	300		°C/W	
Junction Temperature	Tj	-40~+125			°C
Storage Temperature	T <sub>STG</sub>	-55~+150			°C

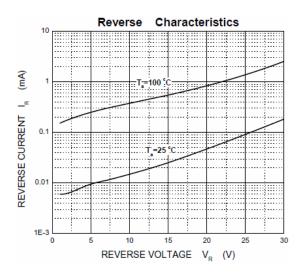
Electrical Characteristics (Ta=25°C unless otherwise specified)

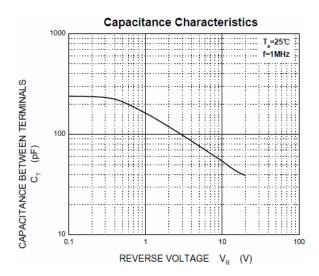
Parameter	Symbol	Min	Тур	Max	Unit	Conditions
Reverse breakdown voltage						
B0540WS-7-F		40			V	I <sub>R</sub> =10 μA
B0530WS-7-F	$V_{(BR)}$	30				I <sub>R</sub> =10 μA
B0520WS-7-F		20				I <sub>R</sub> =10 μA
	V <sub>F</sub>			0.37	V	I <sub>F</sub> =20mA
Forward voltage				0.60		I <sub>F</sub> =1A
Reverse current						
B0540WS-7-F	I <sub>RM</sub>			5.0	μA	V <sub>R</sub> =30V
B0530WS-7-F						V <sub>R</sub> =20V
B0520WS-7-F						V <sub>R</sub> =10V
Capacitance between terminals	Ст		50		pF	<sub>R</sub> =0V,f=1.0MHz
	t <sub>rr</sub>		10		ns	I <sub>F</sub> =I <sub>R</sub> =200mA
Reverse recovery time						Irr=0.1 $XI_R$ , $R_L$ =100 $\Omega$

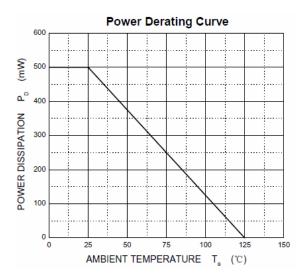


## **Typical Characteristics**



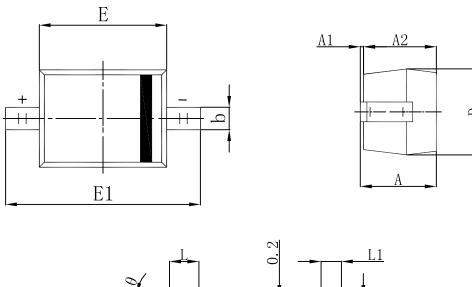


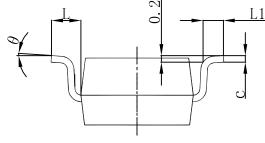






# Package Outline Dimensions SOD-323





Symbol	Dimensions	In Millimeters	Dimensions In Inches		
	Min	Max	Min	Max	
Α		1.100		0.043	
A1	0.000	0.100	0.000	0.004	
A2	0.800	1.000	0.031	0.039	
b	0.250	0.350	0.010	0.014	
С	0.080	0.150	0.003	0.006	
D	1.200	1.400	0.047	0.055	
E	1.600	1.800	0.063	0.071	
E1	2.500	2.750	0.098	0.108	
L	0.475 REF		0.019 REF		
L1	0.250	0.400	0.010	0.016	
θ	0°	8°	0°	8°	



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