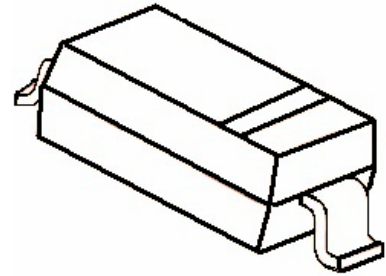


»Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction



SOD-323

»General Description

- Case: molded plastic
- Polarity: Color band denotes cathode
- Package: SOD-323 Plastic Package

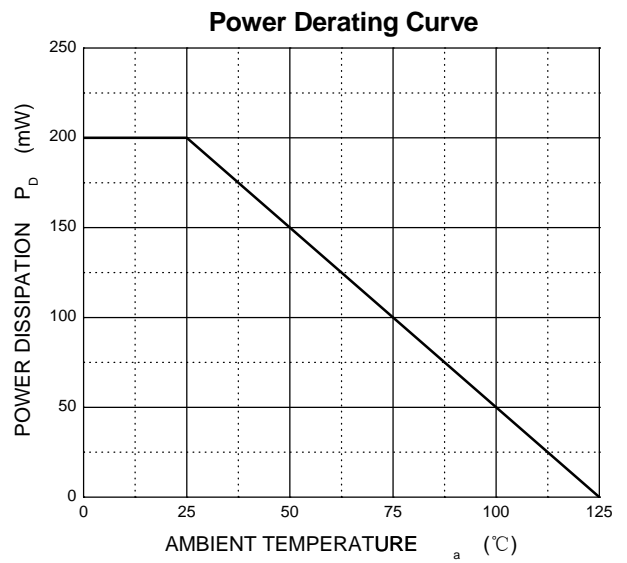
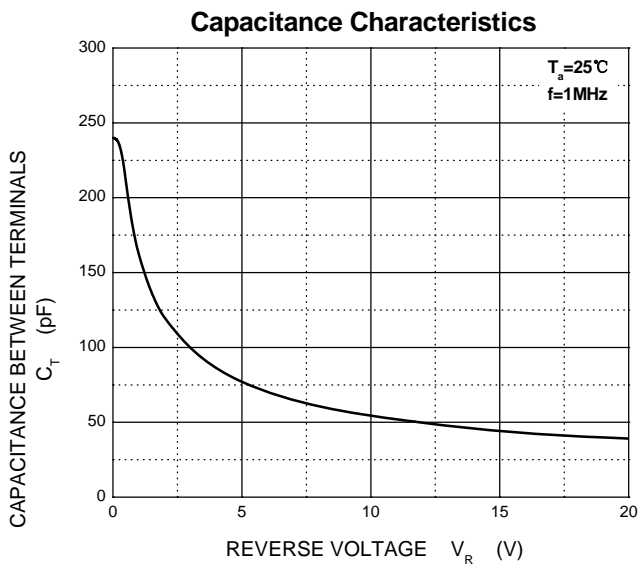
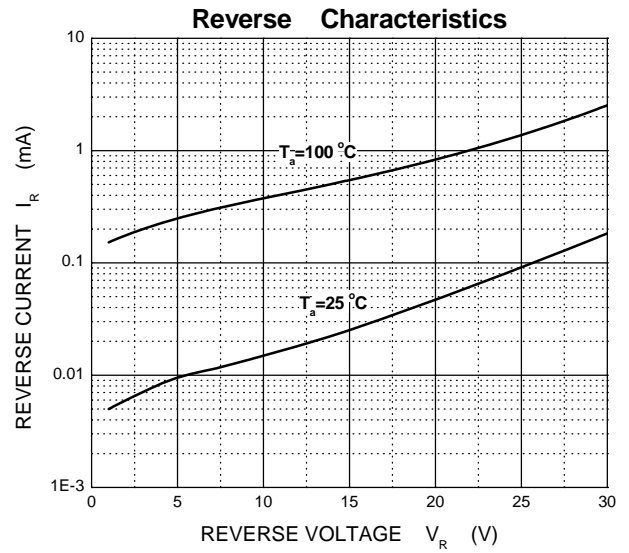
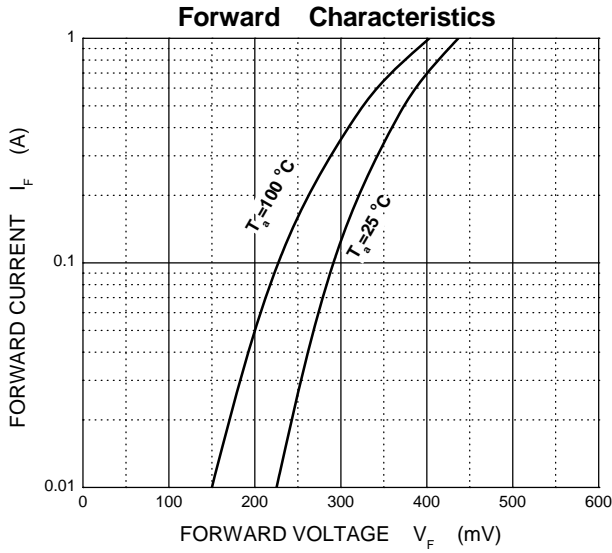
» Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise noted

Parameters	Symbol	B0520WS	B0530WS	B0540WS	Unit
Maximum repetitive peak reverse voltage	VRRM	20	30	40	V
Maximum RMS voltage	VRMS	14	21	28	V
Maximum DC blocking voltage	VDC	20	30	40	V
Maximum average forward rectified current	IFM	0.5			A
Peak forward surge current 8.3 ms single half sine-wave	IFSM	5.5			A
Typical thermal resistance	R θ JA	500			$^{\circ}\text{C}/\text{W}$
Power Dissipation	PD	200			mW
Junction Temperature	Tj	125			$^{\circ}\text{C}$
Storage temperature range	TSTG	-50-+150			$^{\circ}\text{C}$
Voltage rate of change	Dv/dt	1000			V/ μs

» **Electrical Characteristics** @ $T_A=25^{\circ}\text{C}$ unless otherwise noted

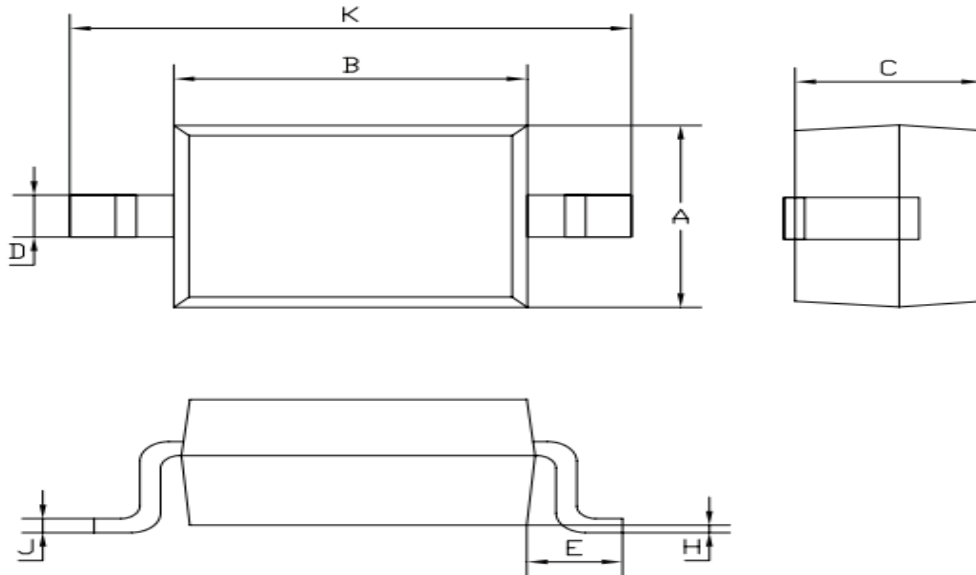
Parameters	Symbol	Test conditions	B0520WS	B0530WS	B0540WS	Unit
Maximum forward voltage	VF	IF = 0.1A	0.330	0.375	---	V
		IF = 0.5A	0.390	0.450	0.510	
		IF = 1.0A	---	---	0.620	
Maximum reverse breakdown voltage	VR	IR=250uA	20	---	---	V
		IR=200uA	---	30	---	
		IR=20.0uA	---	---	40	
Maximum reverse current	IR	VR=10V	75	---	---	uA
		VR=15V	---	80	---	
		VR=20V	250	---	10	
		VR=30V	---	500	---	
Maximum reverse current	IR	VR=40V	---	---	20	uA
Capacitance between terminals	CT	VR = 0V, f = 1MHz		170		pF

»Typical Performance Characteristics ((T_J = 25 °C, unless otherwise noted))



»Package Information

SOD-323



SOD-323		
Dim	Min	Max
A	1.275	1.325
B	1.675	1.725
C	0.9 Typical	
D	0.25	0.35
E	0.27	0.37
H	0.02	0.1
J	0.1 Typical	
K	2.6	2.7

»Ordering information

Order code	Package	Marking	Base qty	Delivery mode
B0520WS	SOD-323	SD	3K	Tape and reel
B0530WS	SOD-323	SE	3K	Tape and reel
B0540WS	SOD-323	SF	3K	Tape and reel