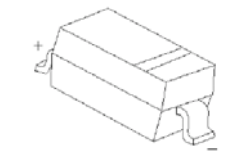
DONGGUAN NANJING ELECTRONICS LTD.,

SOD-323 Plastic-Encapsulate Diodes

B0520WS/B0530WS/B0540WS

SCHOTTKY BARRIER DIODE

SOD-323





FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- High Conductance
- Also Available in Lead Free Version

MARKING: B0520WS: SD
B0530WS: C1
B0540WS: SF

Maximum Ratings @Ta=25℃

Parameter	Symbol	B0520WS	B0530WS	B0540WS	Unit
Peak repetitive peak reverse voltage Working peak reverse voltage DC blocking voltage	V_{RRM} V_{RWM} V_R	20	30	40	V
RMS reverse voltage reverse voltage (DC)	$V_{R(RMS)}$	14	21	28	V
Average rectified output current	I_o	0.5			A
Forward current surge peak	I_{FSM}	5.5			A
Power dissipation	P_D	200			mW
Thermal resistance junction to ambient	$R_{\theta JA}$	500			℃/W
Junction temperature	T_j	125			℃
Storage temperature	T_{STG}	-55~+150			℃
Voltage rate of change	dv/dt	1000			V/μs

Electrical Characteristics @Ta=25℃

Parameter	Symbol	B0520WS	B0530WS	B0540WS	Unit	Conditions
Minimum reverse b-reakdown voltage	$V_{(BR)}$	20	--	--	V	I_R=250μA
		--	30	--		I_R=500μA
		--	--	40		I_R=20μA
Forward voltage	V_{F1}	0.33	0.36	--	V	I_F=0.1A
	V_{F2}	0.39	0.45	0.510		I_F=0.5A
	V_{F3}	--	--	0.62		I_F=1A
Reverse current	I_{R1}	75	--	--	μA	V_R=10V
	I_{R2}	--	80	--		V_R=15V
Reverse current	I_{R3}	250	100	10	μA	V_R=20V
	I_{R4}	--	500	--		V_R=30V
	I_{R5}	--	--	20		V_R=40V
Capacitance between terminals	C_T	170	170	170	pF	V_R=0,f=1MHz

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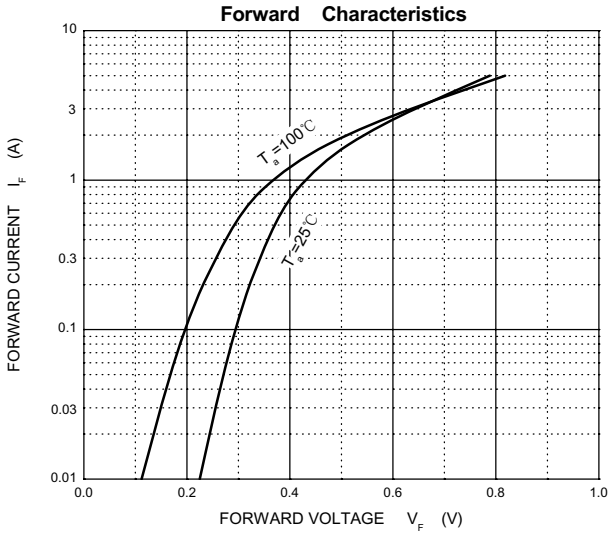
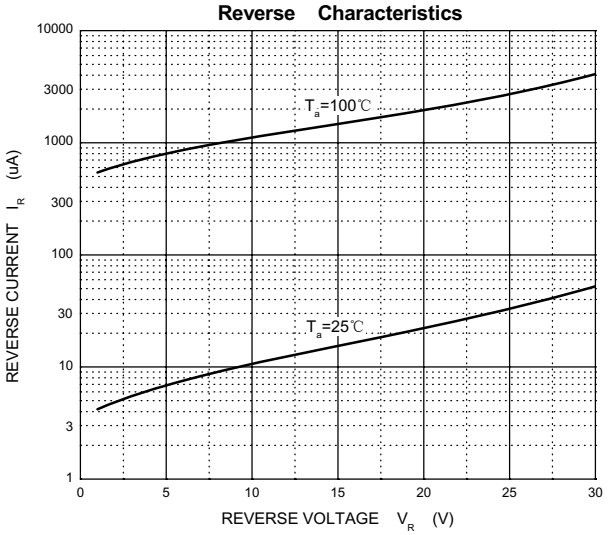
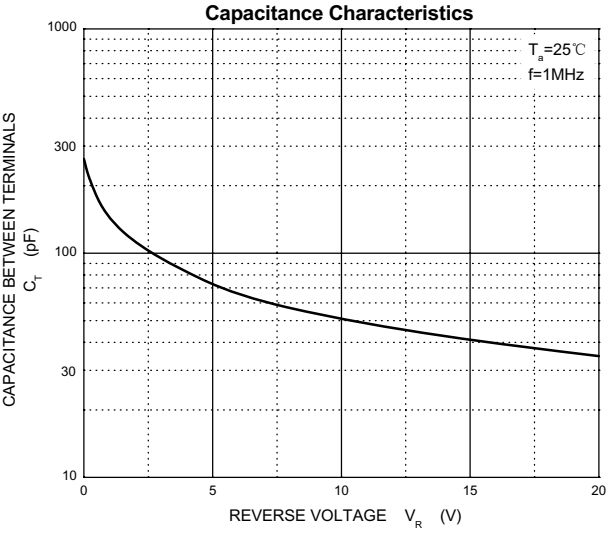
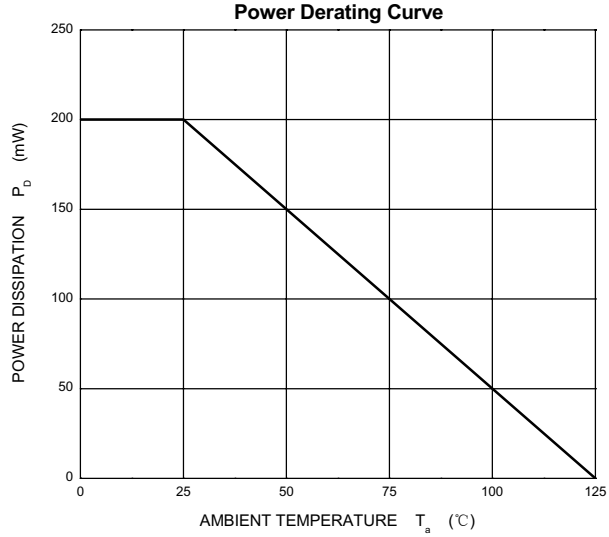
Typical Characteristics B0530WS









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