



DONGGUAN NANJING ELECTRONICS LTD.,

SOD-323 Plastic-Encapsulate Diodes

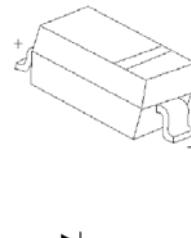
B0520WS/B0530WS/B0540WS

SCHOTTKY BARRIER DIODE

FEATURES

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

SOD-323



MARKING: B0520WS: SD

B0530WS: C1

B0540WS: SF

Maximum Ratings @Ta=25°C

Parameter	Symbol	B0520WS	B0530WS	B0540WS	Unit
Peak repetitive peak reverse voltage	V _{RRM}				
Working peak reverse voltage	V _{RWM}	20	30	40	V
DC blocking voltage	V _R				
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 _{θJA}		500		°C/W
Junction temperature	T _j		125		°C
Storage temperature	T _{STG}		-55~+150		°C
Voltage rate of change	dv/dt		1000		V/μs

Electrical Characteristics @Ta=25°C

Parameter	Symbol	B0520WS	B0530WS	B0540WS	Unit	Conditions
Minimum reverse b-reckdown 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

Typical Characteristics

B0530WS

