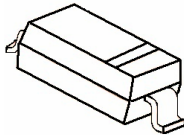




B0520-B0540W

SOD123 Plastic-Encapsulate Schottky Barrier Diode



Features

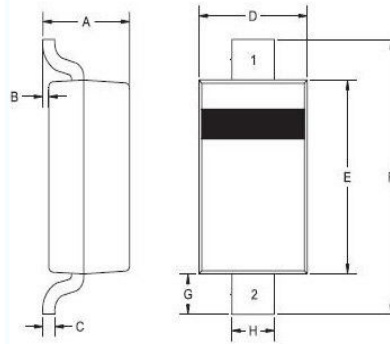
High Current Capability
Low Forward Voltage Drop

Mechanical Data

SOD-123 Small Outline Plastic Package
Polarity: Color band denotes cathode end
Epoxy UL: 94V-0
Mounting Position: Any

Marking: B0520W: SJ
B0530W: SE
B0540W: SL

SOD123



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0,037	0,053	0,95	1,35
B	0,000	0,005	0,00	0,12
C	-	0,008	-	0,20
D	0,055	0,071	1,40	1,80
E	0,098	0,110	2,50	2,80
F	0,142	0,154	3,60	3,90
G	0,016	-	0,40	-
H	0,020	0,028	0,50	0,70

Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	B0520W	B0530W	B0540W	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	RθJA	200			°C/W
Power Dissipation	PD	500			mW
Storage temperature range	TSTG	-50-+150			°C
Voltage rate of change	Dv/dt	1000			V/μS

B0520-B0540W

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified).

Parameters	Symbol	Test conditions	B0520W	B0530W	B0540W	Unit
Maximum forward voltage	VF	IF = 0.1A	0.330	0.375	---	V
		IF = 0.5A	0.385	0.430	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	---	20	---	
		VR=20V	250	---	10	
		VR=30V	---	130	---	
		VR=40V	---	---	20	
Capacitance between terminals	CT	VR = 0V, f = 1MHz			170	pF

RATING AND CHARACTERISTIC CURVES (B0520-B0540W)

