



B0520WS B0530WS B0540WS

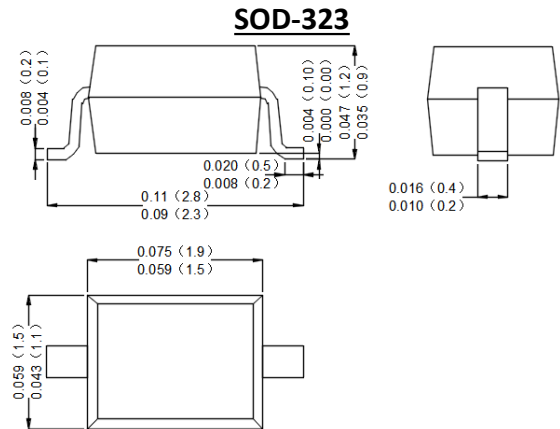
Schottky Barrier Diode

Features

- For use in low voltage.
- High conductance.
- For linear amplification .
- Available in lead free version.

Mechanical Data

- Case:Molded Plastic,SOD-323 .
- Epoxy:UL 94V-0 rate flame retardant
- Terminals:Plated Leads Solderable per MIL-STD-750,Method-2026.
- Marking:on body..
- Mounting Position : Any.



Dimensions in inches and (millimeters)

B0520WS



B0530WS



B0540WS



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

Characteristic	Symbol	B0520WS	B0530WS	B0540WS	Unit
Non-repetitive Peak Reverse Voltage	V_{RM}	20	30	40	V
Reverse Voltage	V_R	20	30	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	
Forward Continuous Current	I_F	0.5			A
Peak Forward Surge Current@ $t_P = 8.3ms$	I_{FSM}	5.5			A
Power Dissipation	P_D	200			mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500			°C/W
Operating Temperature Range,	T_j	125			°C
Storage Temperature Range	T_{STG}	-55 ~ +150			°C
Voltage Rate Of Change	d_v/d_T	1000			V/ μs

Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified.)

Characteristic	Symbol	Conditions	B0520WS	B0530WS	B0540WS	Unit
Minimum Reverse Breakdown Voltage	V_{BR}	$I_R=250\mu A$	20			V
		$I_R=130\mu A$		30		
		$I_R=20\mu A$			40	
Maximum Forward Voltage	V_F	$I_F=0.1A$	0.33	0.36		V
		$I_F=0.5A$	0.39	0.45	0.51	
		$I_F=1A$			0.62	
Maximum Reverse Current	I_R	$V_R=20V$	250		10	μA
		$V_R=30V$		130		
		$V_R=40V$			20	
Diode Capacitance	C_D	$V_R=0V, f=1MHz$	170	170	170	pF



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Electrical Characteristics $T_a = 25^\circ\text{C}$ unless otherwise specified

FIG.1 Forward Characteristics

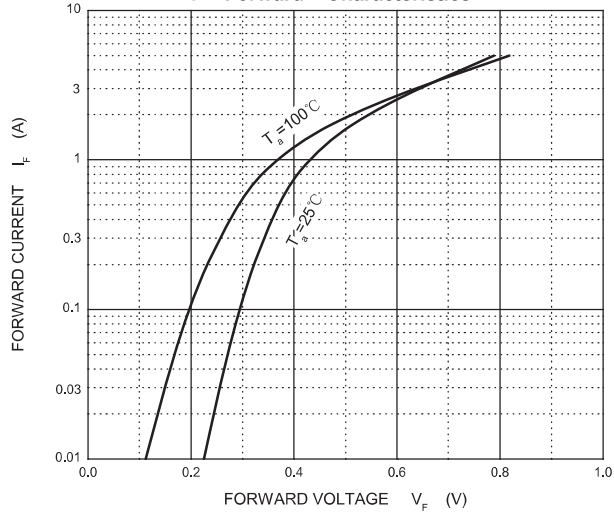


FIG.2 Reverse Characteristics

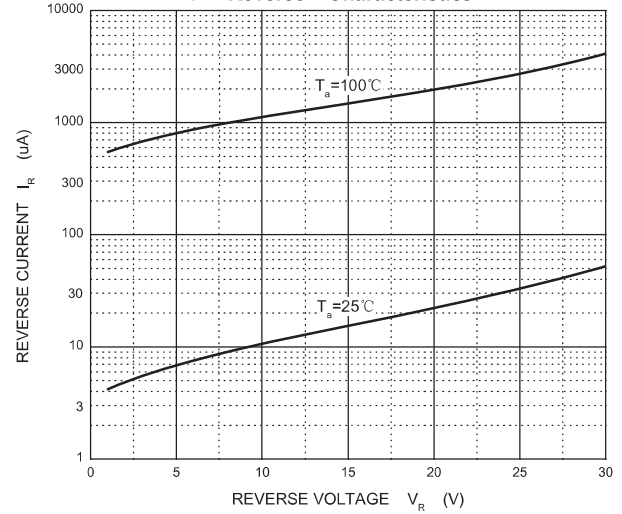


FIG.3 Capacitance Characteristics

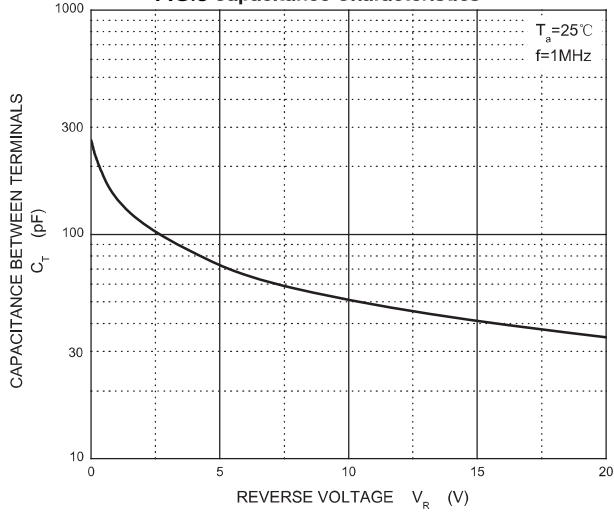
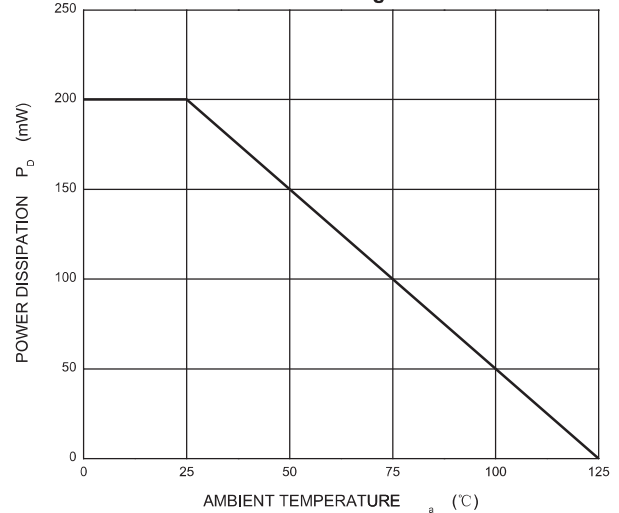


FIG.4 Power Derating Curve





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