



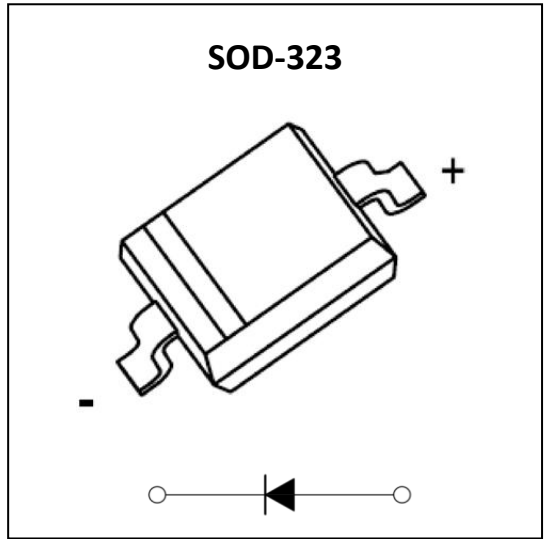
B1040WS Schottky Barrier Diode

Feature

- Low Forward Voltage Drop
- Low Reverse current
- Very Small SMD Package

Application

- Low Voltage Rectification
- High Efficiency DC/DC Conversion
- Switch Mode Power Supply
- Inverse Polarity Protection
- Low Power Consumption Applications



MARKING:



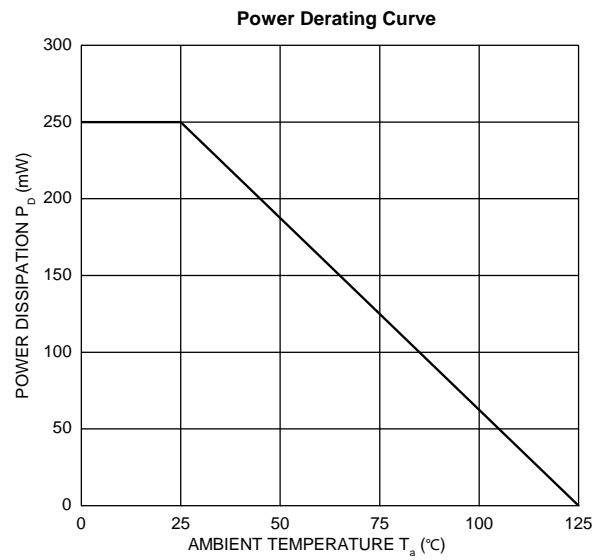
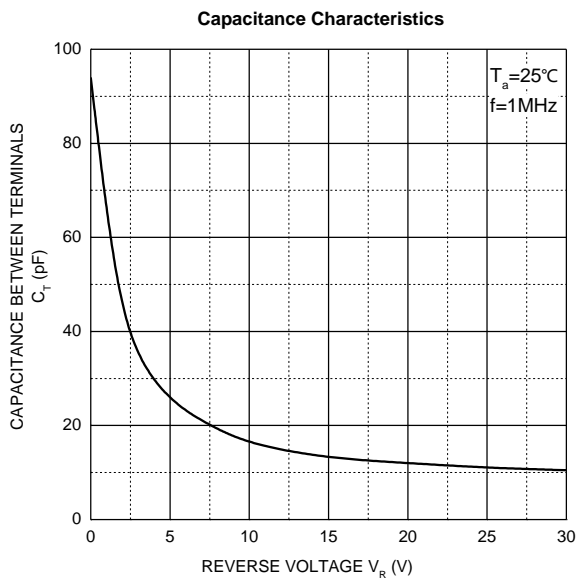
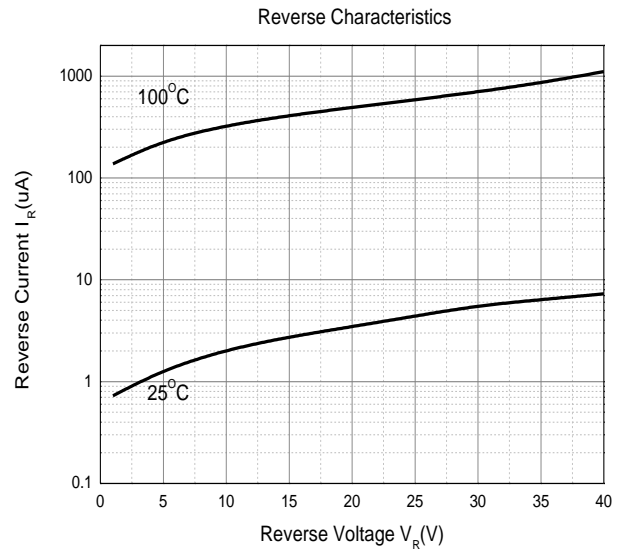
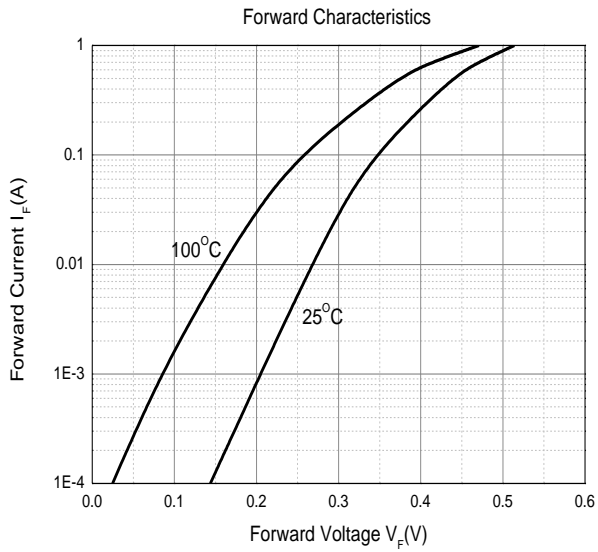
ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	40	V
Mean rectifying current	I_O	1	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	9	A
Power Dissipation	P_D	0.25	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	400	$^{\circ}\text{C}/\text{W}$
Junction Temperature	T_J	125	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

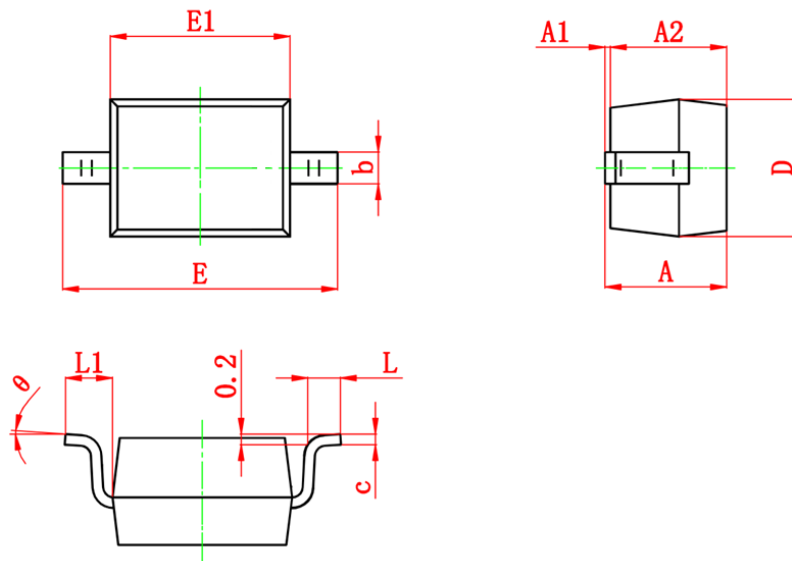
ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse voltage	V_{BR}	$I_R = 250\mu\text{A}$	40			V
Reverse current	I_R	$V_R = 20\text{V}$		2	20	μA
		$V_R = 40\text{V}$		5	50	μA
Forward voltage	V_F	$I_F = 0.5\text{A}$		0.45	0.50	V
		$I_F = 0.7\text{A}$		0.48	0.54	V
		$I_F = 1\text{A}$		0.5	0.62	V
Diode capacitance	C_D	$V_R = 10\text{V}, f = 1\text{MHz}$		18		pF

Typical Characteristics



SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.150MAX		0.045MAX	
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.400	0.010	0.016
c	0.080	0.180	0.003	0.007
D	1.200	1.400	0.047	0.055
E	2.500	2.800	0.098	0.110
E1	1.600	1.800	0.063	0.071
L	0.200	0.450	0.008	0.018
L1	0.475REF		0.019REF	
θ	0°	8°	0°	8°