



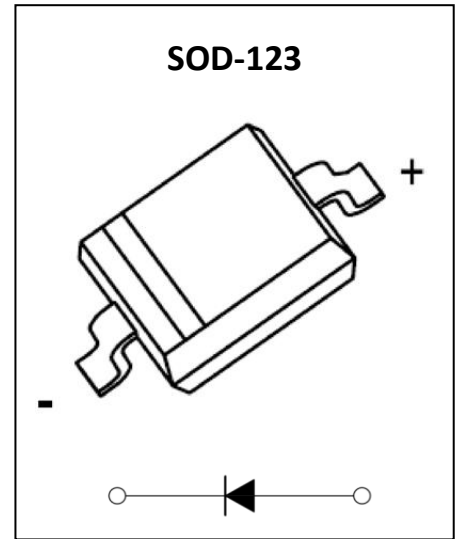
#### B1040W Schottky Barrier Diode

##### Feature

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

##### Application

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



##### MARKING:



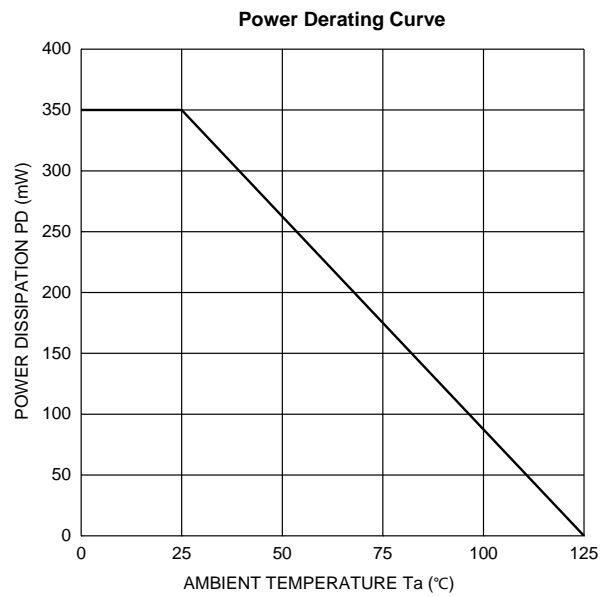
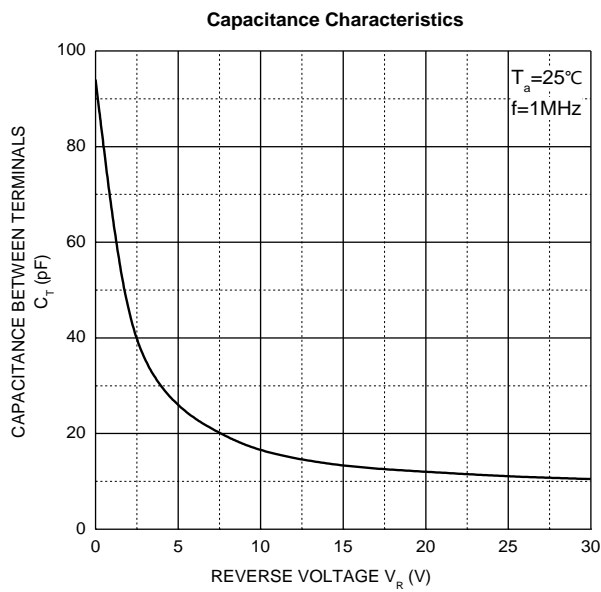
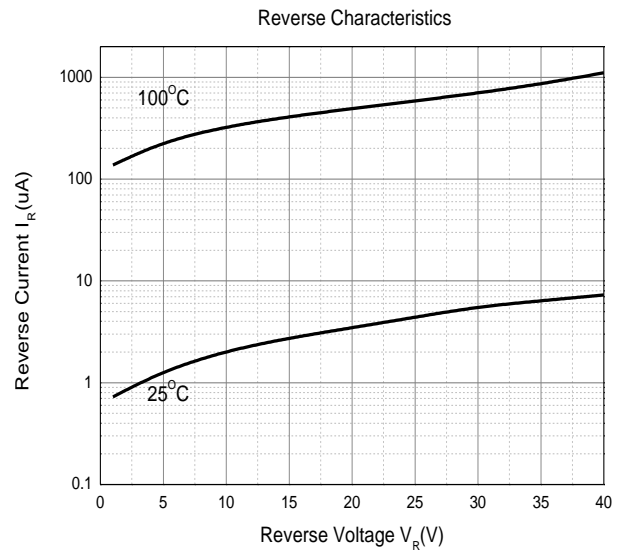
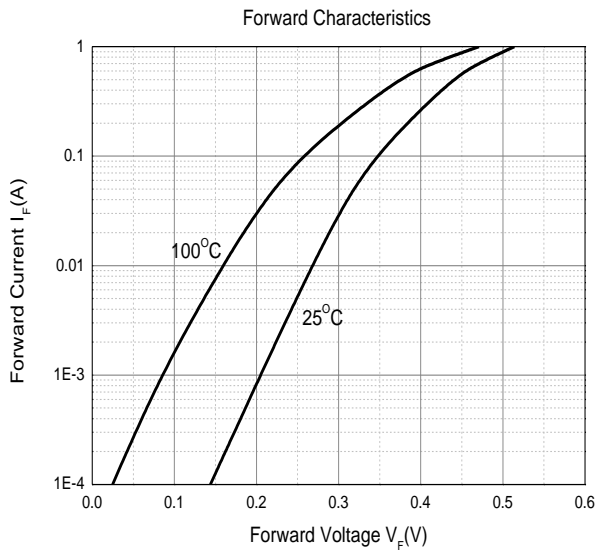
#### ABSOLUTE MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

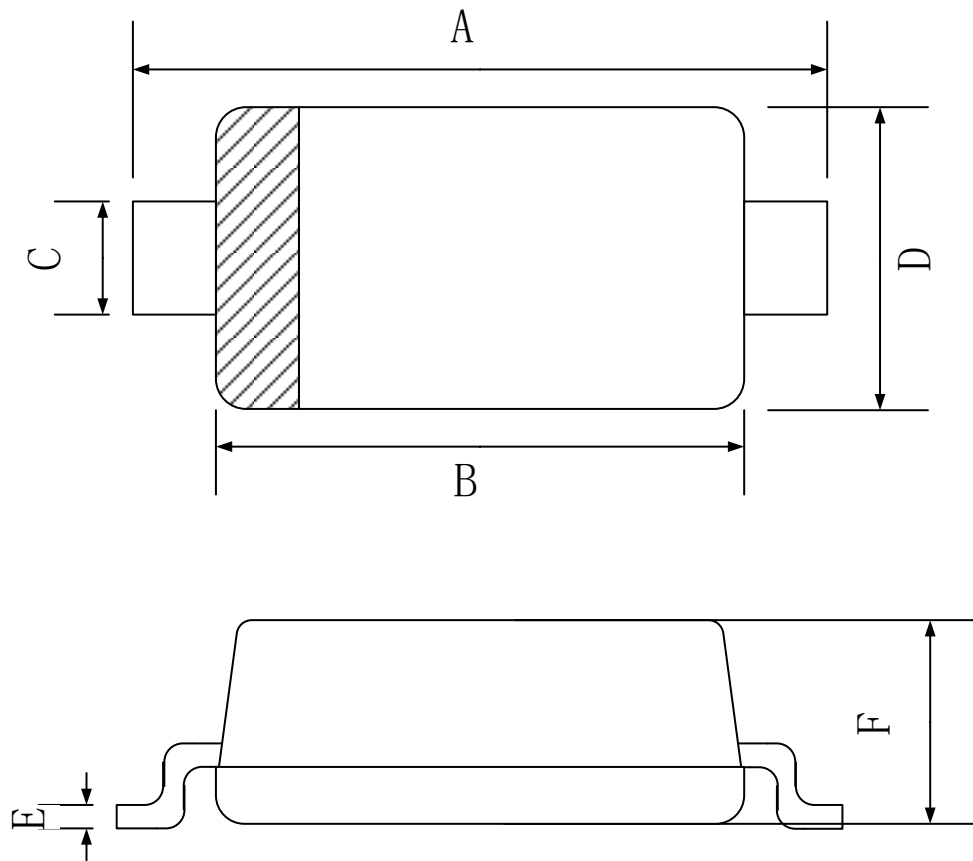
Parameter	Symbol	Value	Unit
DC reverse voltage	$V_R$	40	V
Mean rectifying current	$I_O$	1	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	$I_{FSM}$	9	A
Power Dissipation	$P_D$	0.35	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	285	$^{\circ}\text{C/W}$
Junction Temperature	$T_J$	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	$\mu\text{A}$
		$V_R = 40\text{V}$		5	50	$\mu\text{A}$
Forward voltage	$V_F$	$I_F = 0.5\text{A}$		0.45	0.5	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-123 Package Outline Dimensions**


Symbol	Dimensions In Millimeters		
	Min.	Typ.	Max.
A	3.45	3.65	3.85
B	2.55	2.65	2.75
C	0.45	0.55	0.65
D	1.50	1.60	1.70
E	0.09	0.105	0.12
F	0.95	1.15	1.35