

SOD-123 Plastic-Encapsulate Diodes

B1040W SCHOTTKY BARRIER DIODE

FEATURES

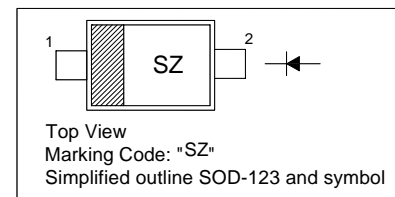
- Low Forward Voltage Drop
- Very Small SMD Package

APPLICATIONS

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



MARKING: SZ

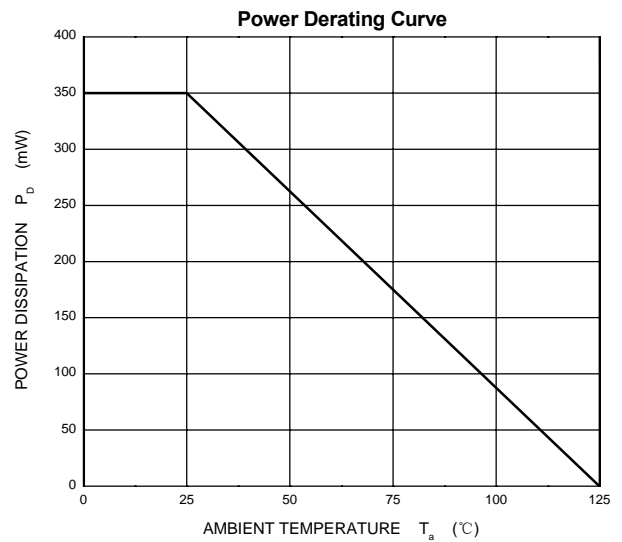
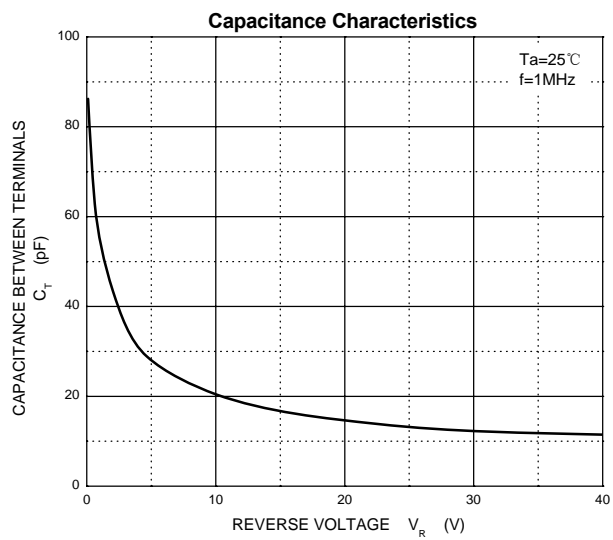
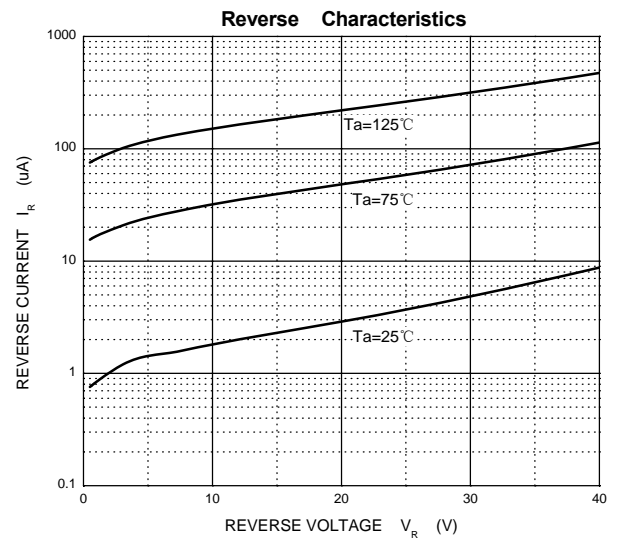
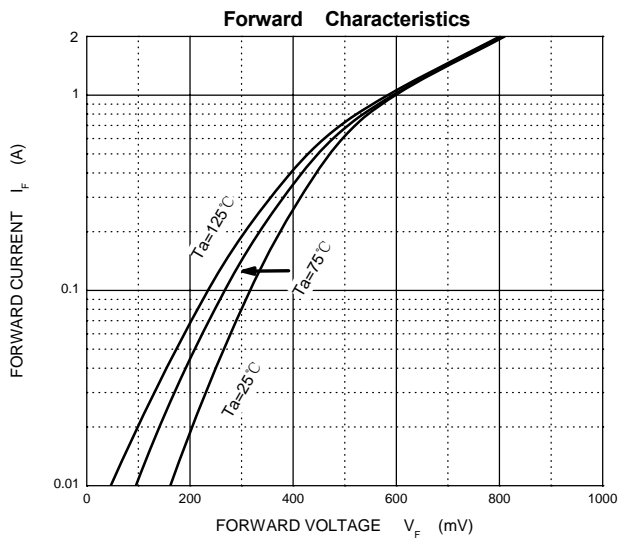
MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	40	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I_o	Average Rectified Output Current	1	A
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	5	A
P_D	Power Dissipation	350	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	285	$^\circ\text{C}/\text{W}$
T_j	Junction Temperature	125	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1\text{mA}$	40			V
Reverse current	I_R	$V_R=20\text{V}$			50	μA
Forward voltage	V_F	$I_F=0.5\text{A}$			0.51	V
		$I_F=0.7\text{A}$			0.55	
Total capacitance	C_{tot}	$V_R=10\text{V}, f=1\text{MHz}$			20	pF

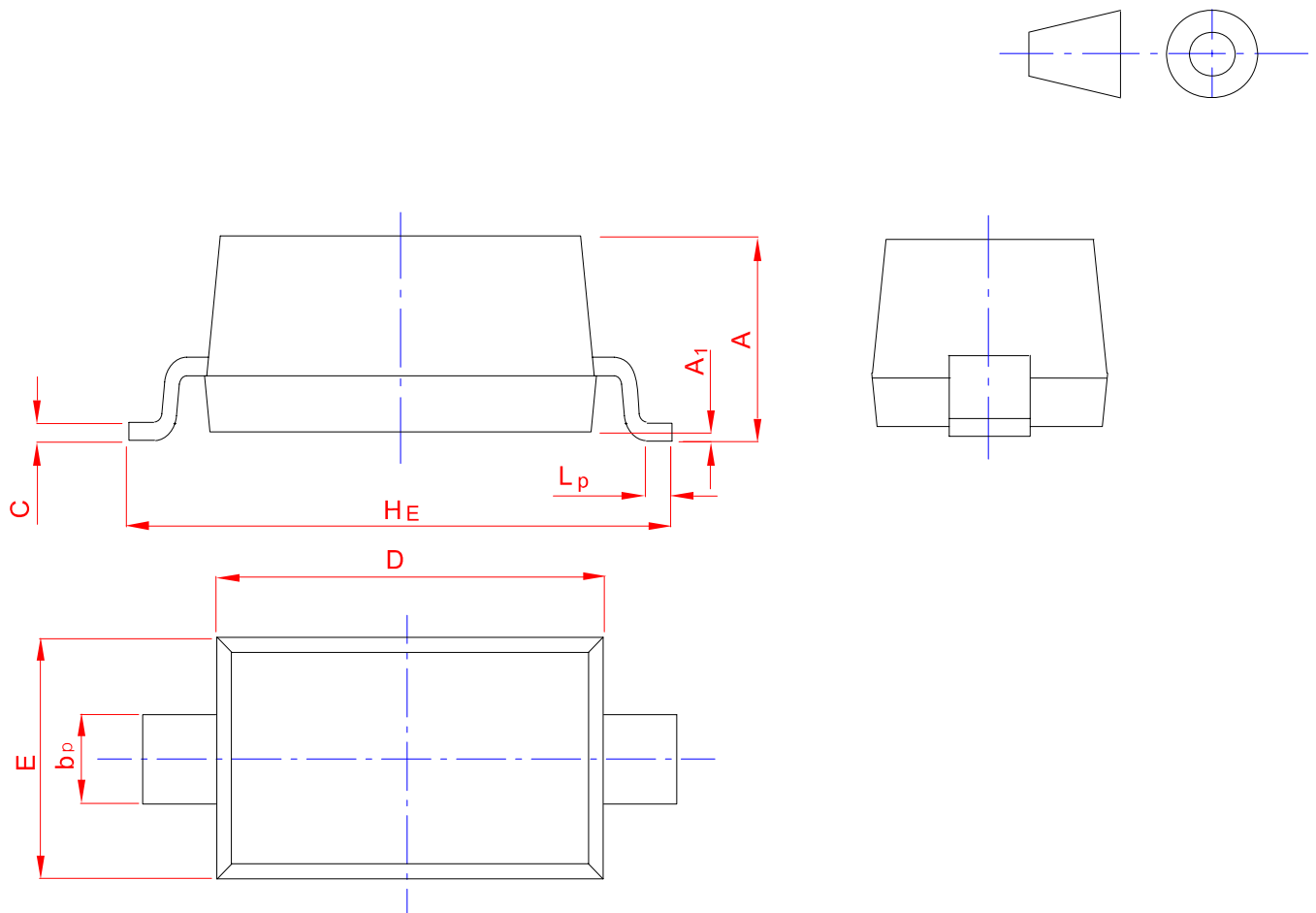
Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	bp	C	D	E	HE	A1	Lp
mm	1.20	0.60	0.135	2.75	1.65	3.85	0.10	0.50
	0.90	0.50	0.100	2.55	1.55	3.55	0.01	0.20