

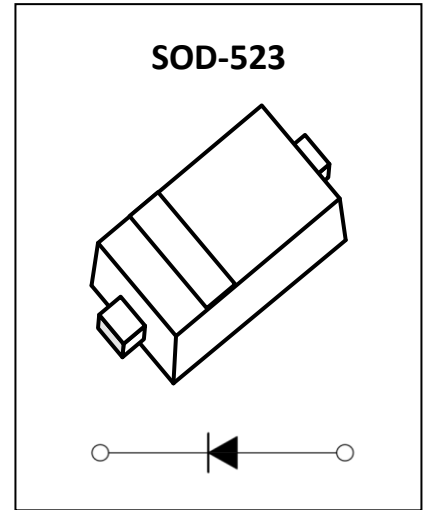


#### B1020X Schottky Barrier Diode

##### Feature

- Extremely Fast Switch Speed
- Low Forward Voltage

##### MARKING:



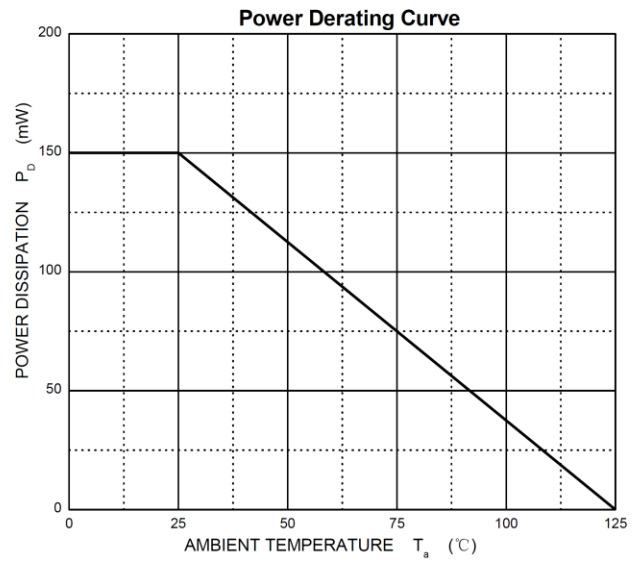
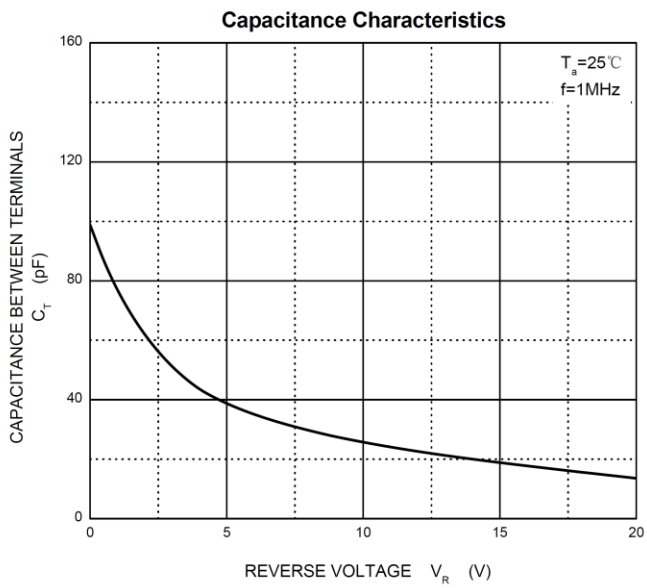
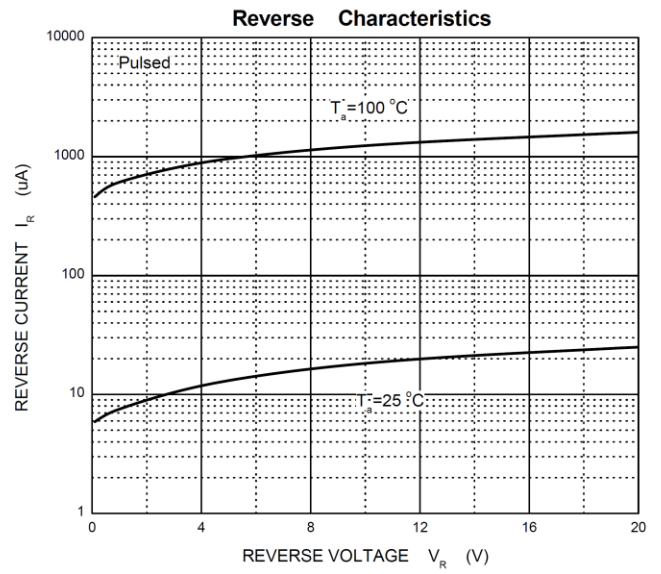
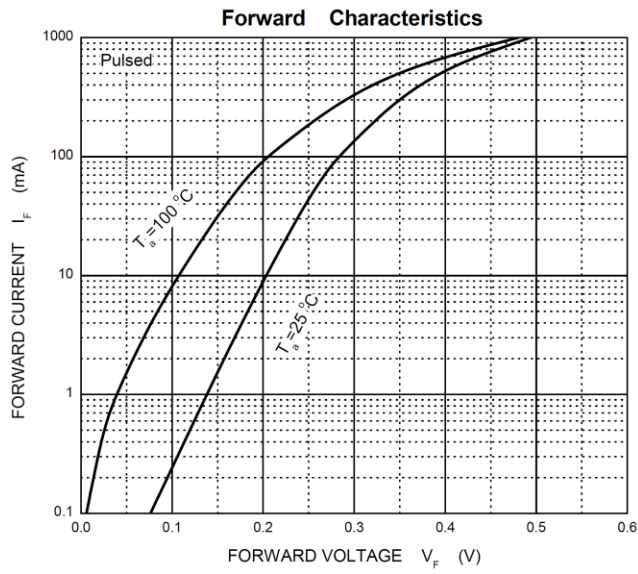
#### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
DC reverse voltage	V <sub>R</sub>	20	V
Mean rectifying current	I <sub>O</sub>	1	A
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I <sub>FSM</sub>	4	A
Power Dissipation	P <sub>D</sub>	0.15	W
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	667	°C/W
Junction Temperature	T <sub>J</sub>	125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150	°C

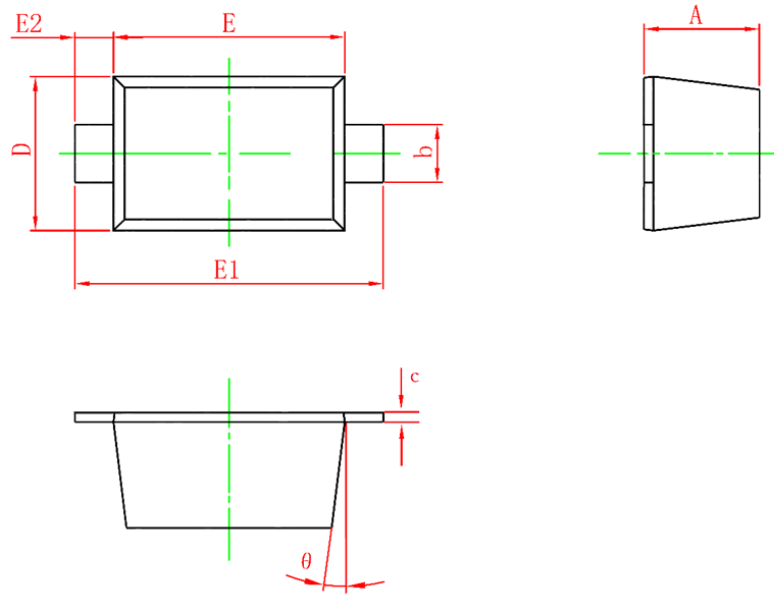
#### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse breakdown voltage	V <sub>(BR)</sub>	I <sub>R</sub> =250μA	20			V
Forward voltage	V <sub>F1</sub>	I <sub>F</sub> =10mA			0.23	V
	V <sub>F2</sub>	I <sub>F</sub> =100mA			0.305	V
	V <sub>F3</sub>	I <sub>F</sub> =1A			0.50	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =10V			80	μA
		V <sub>R</sub> =20V			100	μA
Capacitance between terminals	C <sub>T</sub>	V <sub>R</sub> =0V,f=1MHZ			120	pF

**Typical Characteristics**



## SOD-523 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.470	0.770	0.018	0.030
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200REF		0.008REF	
θ	7°REF		7°REF	