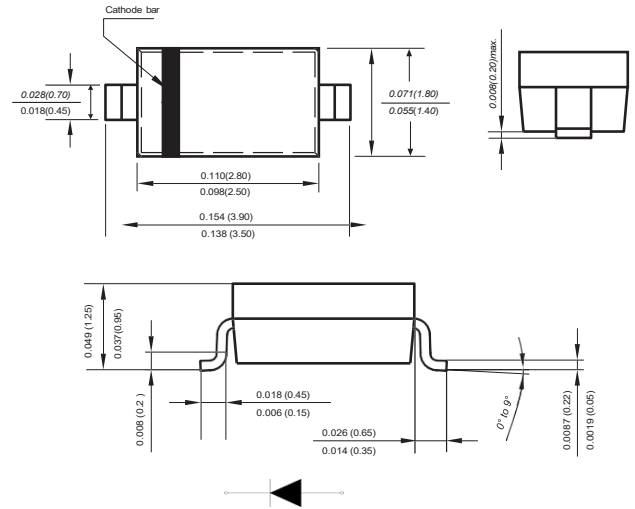


FAST SWITCHING DIODES

Features

- ◆ Fast switching speed
- ◆ Surface mount package ideally suited
- ◆ for automatic insertion
- ◆ For general purpose switching applications High
- ◆ conductance

SOD-123



Absolute Maximum Ratings at 25 °C

Dimensions in inches and (millimeters)

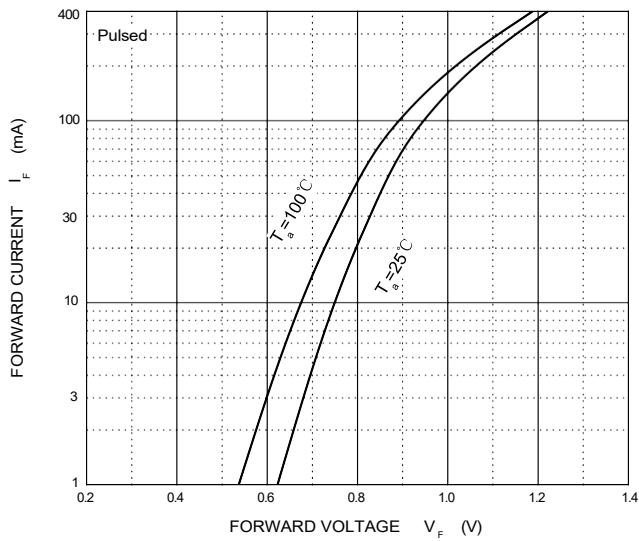
PARAMETER	SYMBOLS	BAV19W	BAV20W	BAV21W	UNITS
Non-Repetitive Peak Reverse Voltage	V_{RM}	120	200	250	V
Working Peak Reverse Voltage	V_{RWM}	100	150	200	V
Peak Repetitive Reverse Voltage	V_{RRM}				V
RMS Reverse voltage	$V_{R(RMS)}$	71	106	141	V
Forward continuous current	I_{FM}	250			mA
Average rectified output current	I_o	200			mA
Peak forward surge current @=1s @=1ms @=1us	I_{FSM}	1 3 9			A
Repetitive peak forward current	I_{FRM}	625			mA
Power dissipation	P_d	500			mW
Thermal resistance junction to ambient	$R_{\theta JA}$	500			K/W
Junction Temperature	T_J	-55 to +150			°C
Storage Temperature	T_{STG}	-55 to +150			°C
Non-Repetitive peak reverse voltage	V_{RM}	120	200	250	V

Characteristics at Ta= 25 °C

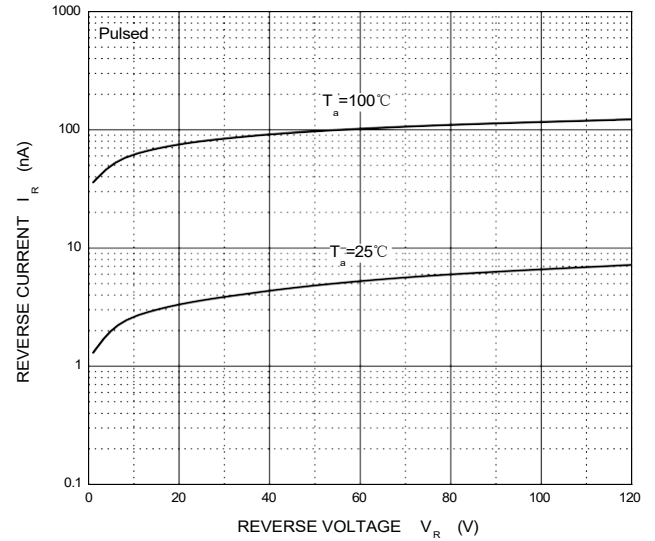
PARAMETER	SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}			1.0	V	$I_F=0.1A$
	V_{F2}			1.25	V	$I_F=0.2A$
Reverse current	I_R			0.1	uA	$V_R=100V$
				0.1	uA	$V_R=150V$
				0.1	uA	$V_R=200V$
Capacitance between terminals	C_T			5	pF	$V_R=0V, f=1.0MHz$
Reverse recovery time	t_{rr}			50	ns	$I_F=I_R=10mA$ $I_{rr}=0.1I_R, R_L=100\Omega$

Typical Characteristics

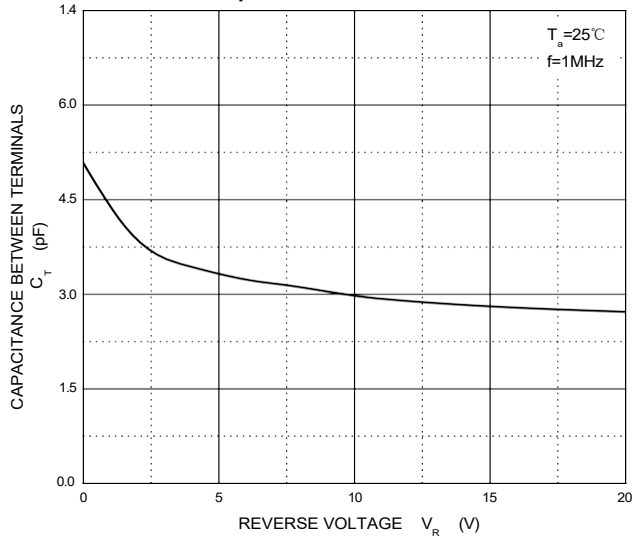
Forward Characteristics



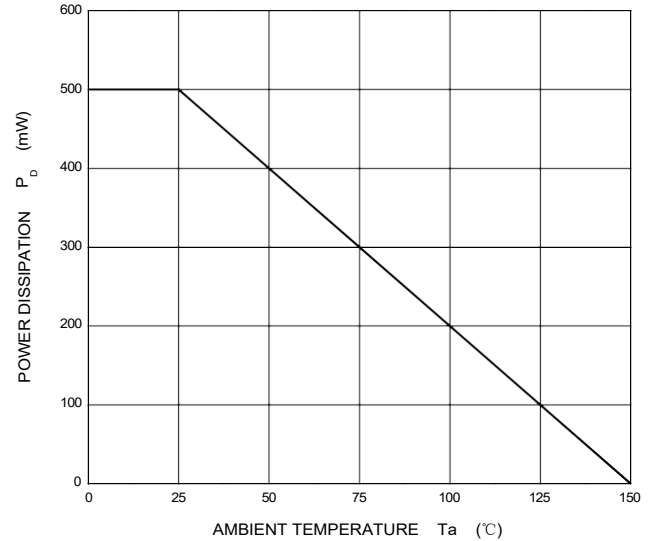
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve



The curve above is for reference only.