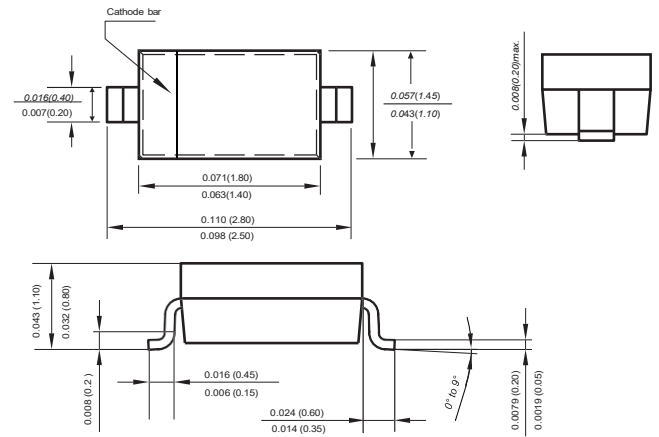


FAST SWITCHING DIODES

Features

- ◆ For surface mounted applications
- ◆ Glass Passivated Chip Junction
- ◆ Fast reverse recovery time
- ◆ Ideal for automated placement

SOD-323



Dimensions in inches and (millimeters)

Absolute Maximum Ratings at 25 °C

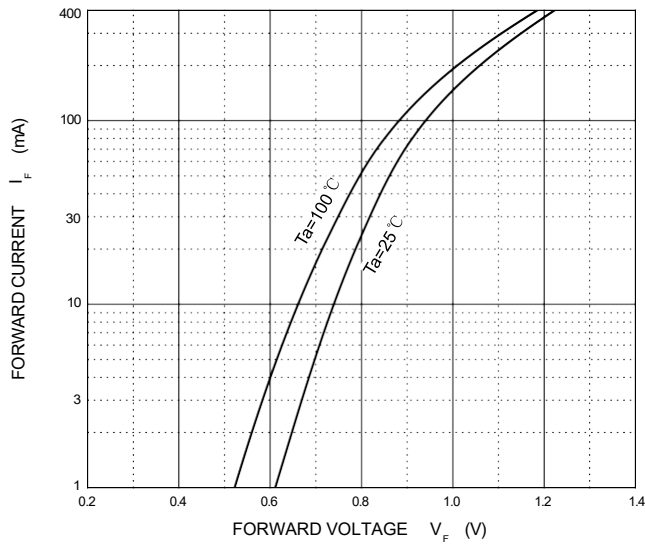
PARAMETER	SYMBOLS	BAV19WS	BAV20WS	BAV21WS	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	120	200	250	V
Maximum RMS voltage	$V_{R(RMS)}$	100	150	200	V
Continuous Forward Current	I_o		250		mA
Repetitive Peak Forward Current	I_{FM}		625		mA
Non-reptitive Peak forward surge current @=1s @=1ms @=1us	I_{FSM}		1 3 9		A
Total Power dissipation	P_{tot}		500		mW
Operating junction temperature	T_j		-55 to +150		°C
Storage temperature	T_{STG}		-55 to +150		°C

Characteristics at Ta= 25 °C

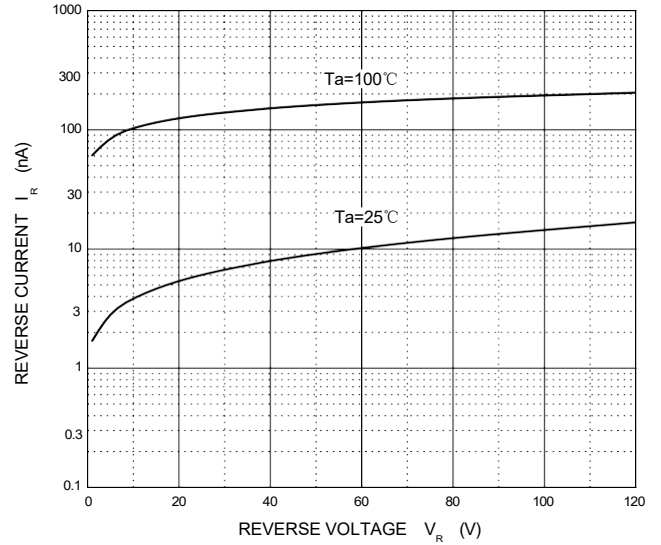
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse current	I_R	$V_R=120V$ BAV19WS	$T_a=25\text{ }^{\circ}C$		0.1	uA
			$T_a=150\text{ }^{\circ}C$		100	
		$V_R=200V$ BAV20WS	$T_a=25\text{ }^{\circ}C$		0.1	uA
			$T_a=150\text{ }^{\circ}C$		100	
		$V_R=250V$ BAV21WS	$T_a=25\text{ }^{\circ}C$		0.1	uA
			$T_a=150\text{ }^{\circ}C$		100	
Forward voltage	V_F	$I_F=100mA$			1	V
		$I_F=200mA$			1.25	
Total capacitance	C_{tot}	$V_R=0V, f=1MHz$			5	pF
Reverse recovery time	t_{rr}	$I_F=0.5A$ $I_R=1A$, $I_{rr}=0.25A$, $R_L=100\Omega$			50	ns

Typical Characteristics

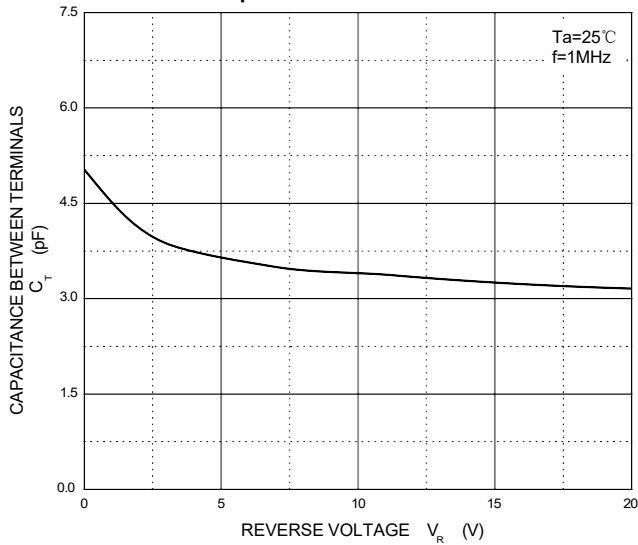
Forward Characteristics



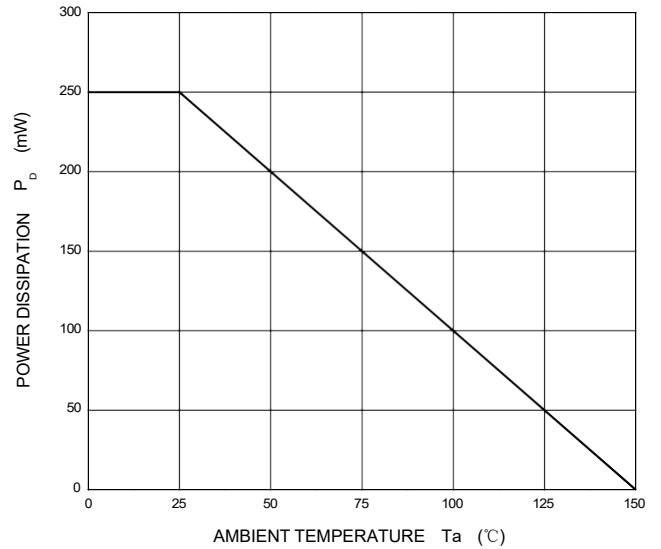
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve



The curve above is for reference only.