

SOD-123 Plastic-Encapsulate Diodes

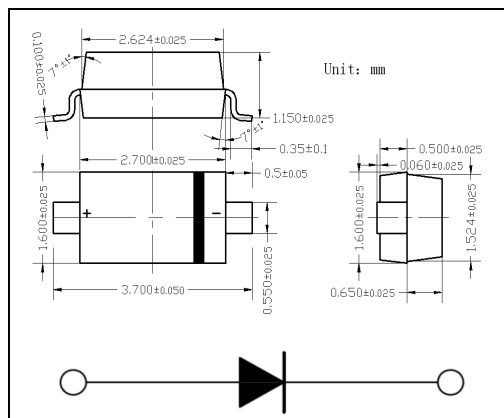
BAV20W

Switching Diode

Features

- Low Reverse Current
- Surface Mount Package Ideally Suited for Automatic Insertion
- Fast Switching Speed
- For General Purpose Switching Applications

Marking: T2



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

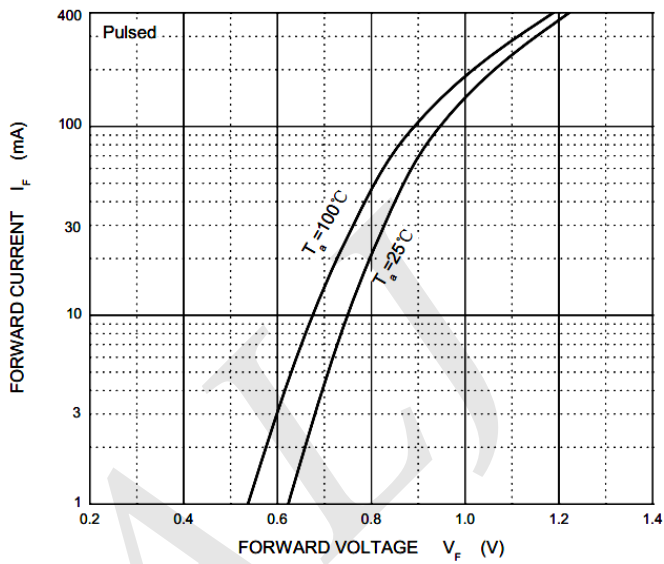
Symbol	Parameter	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	200	V
V_{RRM}	Peak Repetitive Peak Reverse Voltage	150	V
V_{RWM}	Working peak reverse voltage		V
$V_{R(RMS)}$	RMS reverse voltage	106	V
I_o	Average Rectified Output Current	200	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2.0	A
P_D	Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	250	$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

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

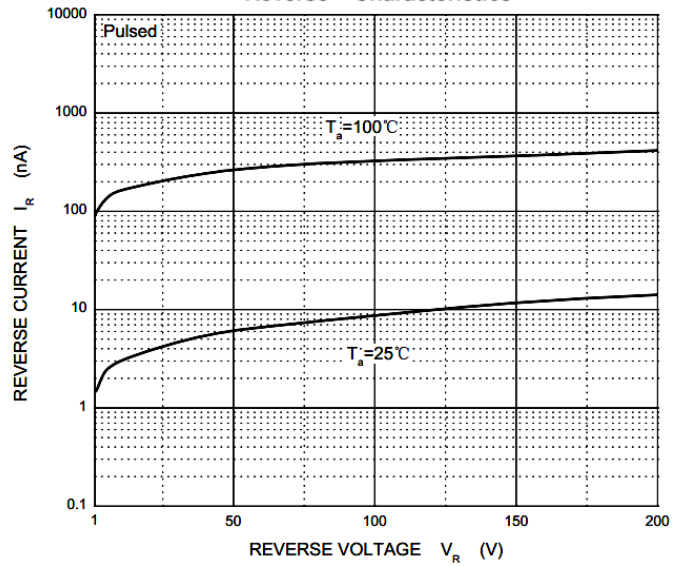
Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	$I_R = 100\mu\text{A}$	200			V
I_R	Reverse current	$V_R = 150\text{V}$			0.1	μA
V_F	Forward voltage	$I_F = 100\text{mA}$			1	V
		$I_F = 200\text{mA}$			1.25	V
C_{tot}	Total capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$			5	pF
t_{rr}	Reverse recovery time	$I_F = I_R = 30\text{mA}, I_{rr} = 0.1 \cdot I_R, R_L = 100\Omega$			50	ns

Typical Characteristics

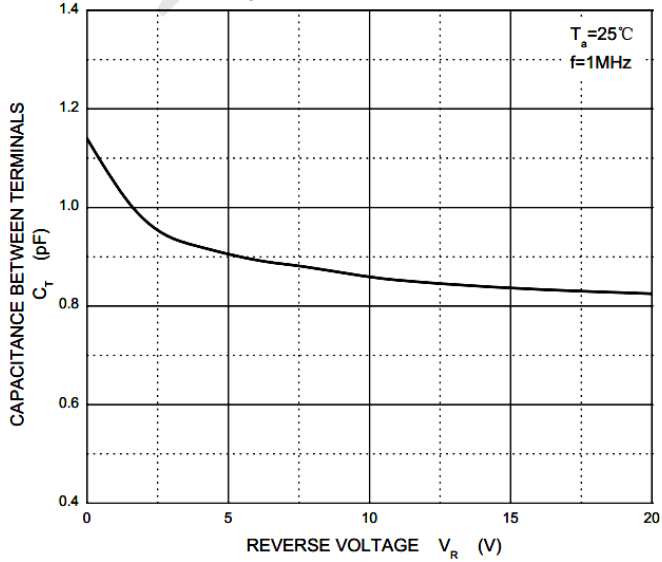
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

