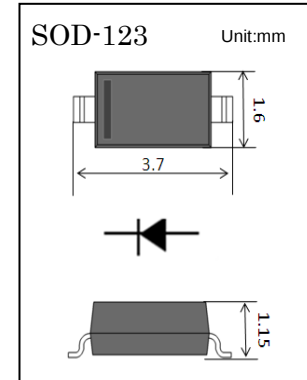


DATA SHEET

BAV116W

- ◇ Fast Switching Devices
- ◇ SOD123 Micro SMD Package
- ◇ Rosh Compliant / Green EMC
- ◇ Matte Tin (Sn) Lead Finish
- ◇ Cathode Band / Device Marking
- ◇ Surface Mount Package Ideally Suited For Automatic Insertion
- ◇ For General Purpose Switching Applications
- ◇ High Conductance

Device Marking Code	
BAV116W	XX



Maximum Ratings (Ta = 25 °C)

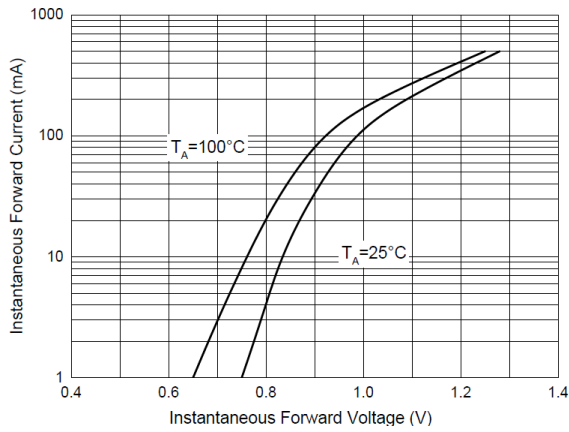
Symbol	Parameter	Value	Units
V_{RSM}	Non-Repetitive Peak Reverse Voltage	130	V
V_{RRM}	Repetitive Peak Reverse Voltage	85	V
I_{FRM}	Repetitive Peak Forward Current	500	mA
$I_{F(AV)}$	Average Forward Current	215	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current (@t=8.3ms)	1	A
P_D	Power Dissipation *	350	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 to +150	°C
R_{JA}	Thermal Resistance Junction to Ambient Air	357	°C/W

* Device Mounted On FR4 PCB, Single-Sided Copper, Tin-Plated And Standard Footprint.

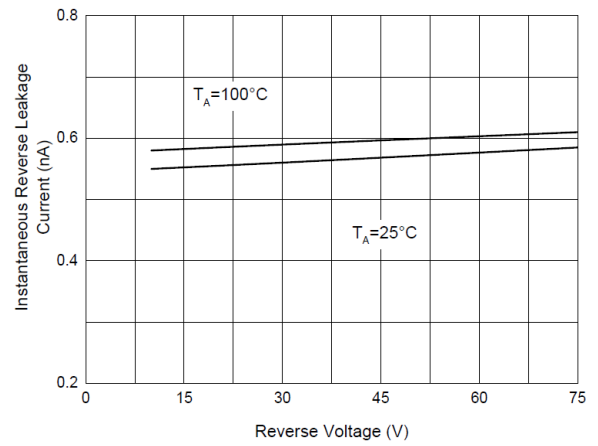
Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Conditions	Min	Max	Units
V_{BR}	Reverse Breakdown Voltage	$I_R = 100\mu A$	130		V
V_F	Forward Voltage	$I_F = 1mA$		0.9	V
		$I_F = 10mA$		1	
		$I_F = 50mA$		1.1	
		$I_F = 150mA$		1.25	
I_R	Reverse current	$V_R = 75V$		5	nA
C_J	Junction Capacitance	$V_R = 0V, f = 1MHz$		2	pF
t_{rr}	Reverse Recovery Time	$I_F = I_R = 10mA,$ $I_{rr} = 0.1 * I_R, R_L = 100\Omega$		3	uS

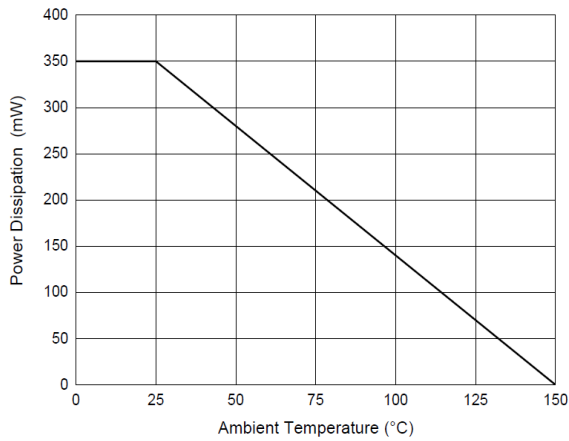
Curve Characteristics



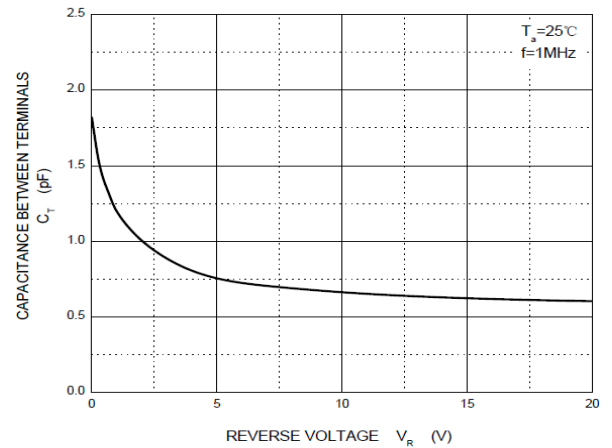
Typical Instantaneous Forward Characteristics



Typical Reverse Leakage Characteristics



Power Derating Curve



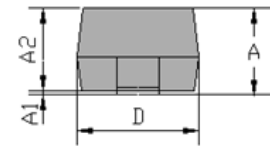
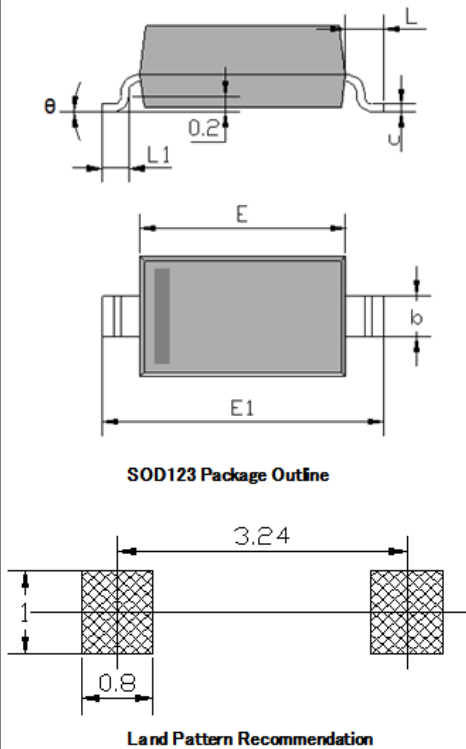
Capacitance Characteristics

Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
BAV116W	SOD123	Tape & Reel 3000pcs /7" Reel	8 mm	4 mm	Conductive	

Package Dimensions

Package outline : SOD-123



Unit	A	A1	A2	b	c	D	E	E1	L	L1	θ
Max.	1.25	0.10	1.15	0.65	0.15	1.70	2.80	3.85	0.500 REF.	0.45	8°
Min.	1.05	0.00	1.05	0.45	0.08	1.50	2.60	3.55		0.25	0°

Note:

1. Halogen free, EMC
2. Pb free solder
3. Lead thickness includes solder plating
4. Other Tolerance: ± 0.05
5. Dimensions are exclusive of Burrs, Mold Flash and Bar extrusions
6. Unit: mm

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