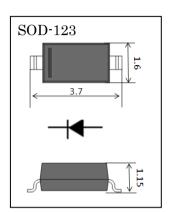


# FAST SWITCHING DIODE / DATA SHEET

# 1N4148W & BAV16W

- ♦ Fast switching devices
- ♦ SOD123 Micro SMD package
- ♦ RoHS 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			
1N4148W	T4 or T4		
BAV16W	T6 or T6		



# Maximum Ratings (Ta = 25 °C)

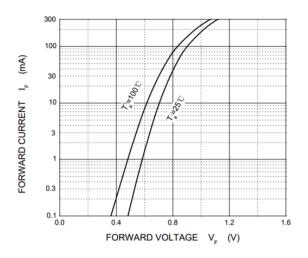
Symbol	Parameter	Units	
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	100	V
$V_{RRM}$	Repetitive Peak Reverse Voltage	100	V
$V_{R(RMS)}$	RMS Reverse Voltage	75	٧
$I_{FM}$	Forward Continuous Current	300	mA
$I_{\rm O}$	Average Rectified Output Current	150	mA
$\mathbf{I}_{FSM}$	Non-Repetitive Peak Forward Surge Current	2.0	Α
	( @t=1.0us )		
$P_{\scriptscriptstyleD}$	Power Dissipation	350	mW
$T_J$	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	−55 to +150	°C

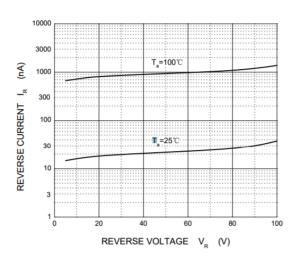
## Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Conditions	Min	Max	Units
$V_{F}$	Forward Voltage	I <sub>F</sub> = 1mA		0.715	٧
		I <sub>F</sub> = 10mA		0.855	V
		I <sub>F</sub> = 50mA		1.0	V
		I <sub>F</sub> = 150mA		1.25	V
I <sub>R</sub>	Reverse current	V <sub>R</sub> = 75V (25°C)		1	μΑ
		V <sub>R</sub> = 20V (25°C)		25	nA
		V <sub>R</sub> = 75V (150°C)		50	μΑ
C <sub>T</sub>	Capacitance	V <sub>R</sub> = 0V, f = 1MHz		2	pF
t <sub>rr</sub>	Reverse Recovery Time	$I_F = I_R = 10$ mA,		4	ns
		$I_{RR} = 1 \text{mA}, R_L = 100 \Omega$			



#### **Characteristics Curves**





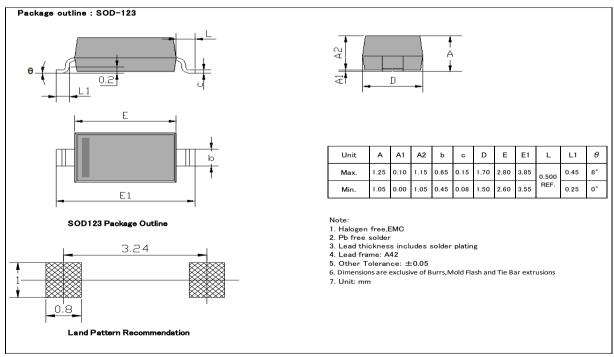
Forward current(IF) vs Forward voltage(VF)

Reverse current(IR) vs Reverse voltage(VR)

## **Ordering Information**

Device	Package	Shipping	Tape	Emboss	Tape	Notes
			wide	pitch	specification	
1N4148W	COD100	Tape & Reel	0	4	O a sa di ca bis ca	
& BAV16W	SOD123	3000pcs /7" Reel	8 mm	4 mm	Conductive	

## **Package Dimensions**





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