



### **SURFACE MOUNT FAST SWITCHING DIODE**

## **REVERSE VOLTAGE - 250 Volts** FORWARD CURRENT - 0.2 Ampere

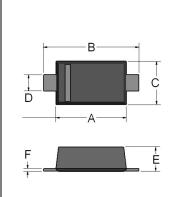
**SOD-123F** 

#### **FEATURES**

- · Fast switching diode
- SOD-123F package
- Surface device type mounting
  General Purpose Diodes High Voltage Application
- Green EMC
- Matte Tin(Sn) Lead Finish
- RoHS compliant
- Band Indicates Cathode

#### **MECHANICAL DATA**

• Polarity: Color band denotes cathode



SOD-123F					
DIM.	MIN.	MAX.			
Α	2.50	2.70			
В	3.30	3.70			
С	1.50	1.70			
D	0.50	0.70			
Е	0.80	1.00			
F	0.05	0.20			
All Dimensions in millimeter					

Maximum Ratings & Thermal Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

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Characteristic	Symbol	BAV21WF	Units
Repetitive Peak Reverse Voltage	VRRM	250	V
Repetitive Peak Forward Current	IFRM	200	mA
Power Dissipation	P <sub>D</sub>	400	mW
Operating Temperature Range	T <sub>J</sub>	+150	$^{\circ}\mathbb{C}$
Storage Temperature Range	T <sub>STG</sub>	-65~+150	$^{\circ}$

#### Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Test Condition	Symbol	BAV21WF	Unit
Breakdown voltage	IR=100uA	BV	250	V
Maximum Forward Voltage	I <sub>F</sub> = 100mA I <sub>F</sub> = 200mA	V <sub>F</sub>	1000 1250	mV
Maximum DC Reverse Current at Rated DC Blocking Voltage	V <sub>R</sub> = 200V	I <sub>R</sub>	100	nA
Typical Diode Capacitance	V <sub>R</sub> =0V,f=1MHz	$C_D$	5	pF
Reverse Recovery time	$I_F$ =30mA, $I_R$ =30mA $R_L$ =100 $\Omega$ $I_{RR}$ =3mA,	trr	50	ns

REV. 0, Aug-2011, KSYR90

# RATING AND CHARACTERISTIC CURVES BAV21WF



Figure 1. Forward Voltage vs Ambient Temperature

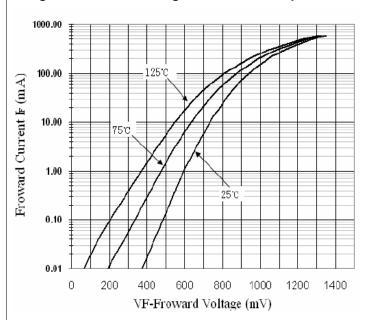
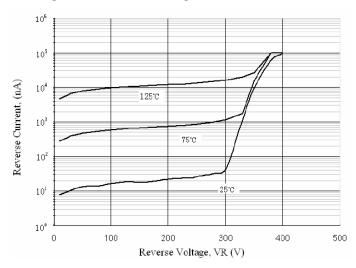


Figure 2. Total Capacitance 0.50 Ta=25°C 0.45 f=1 MHz 0.40 0.35 Capacitance (pF) 0.30 0.25 0.20 0.15 0.10 0.05 0.00 15 20 5 35 40 Reverse Voltage (V)

Figure 3. Reverse Voltage vs Reverse Current



#### **Device Marking:**

Device P/N	Marking code	Equivalent Circuit Diagram
BAV21WF	H3	1 0──── 2



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