

**SURFACE MOUNT
FAST SWITCHING DIODE**

**REVERSE VOLTAGE – 75 Volts
FORWARD CURRENT – 0.15 Ampere**

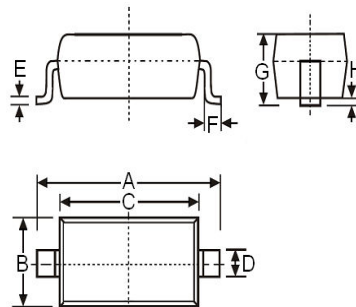
FEATURES

- Fast switching speed
- Ideally suited for automatic insertion
- For general purpose switching applications

MECHANICAL DATA

- Case: SOD-123 Plastic
- Case material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Moisture sensitivity: Level 1 per J-STD-020D
- Lead free in RoHS 2002/95/EC compliant

SOD-123



SOD-123		
Dim.	Min.	Max.
A	3.55	3.85
B	1.50	1.70
C	2.60	2.80
D	0.45	0.65
E	0.08	0.15
F	0.25	0.45
G	1.05	1.25
H	0.00	0.10
Dimensions in millimeter		

Maximum Ratings & Thermal Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	BAV16W	Units
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Repetitive Peak Reverse Voltage	V _{R(RM)}	75	V
Working Peak Reverse Voltage	V _{R(WM)}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _O	150	mA
Repetitive Peak Forward Current @t=1us	I _{FSM}	2	A
@t=1s		1	
Power Dissipation	P _D	400	mW
Thermal Resistance Junction to Ambient	R _{θJA}	315	°C/W
Operating Temperature Range	T _J	125	°C
Storage Temperature Range	T _{STG}	-65~+125	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Test Condition	Symbol	BAV16W	Unit
Maximum Forward Voltage	I _F = 1mA	V _F	715	mV
	I _F = 10mA		855	
	I _F = 50mA		1000	
	I _F = 150mA		1250	
Maximum DC Reverse Current at Rated DC Blocking Voltage	V _R = 75V	I _R	1000	nA
	V _R = 20V		25	
Typical Diode Capacitance	V _R = 0V, f=1MHz	C _D	2	pF
Reverse Recovery time	I _{rr} =1mA, I _R =I _F =10mA R _L =100Ω	trr	4	ns

RATING AND CHARACTERISTIC CURVES BAV16W



Fig.1 Typical Forward Characteristics

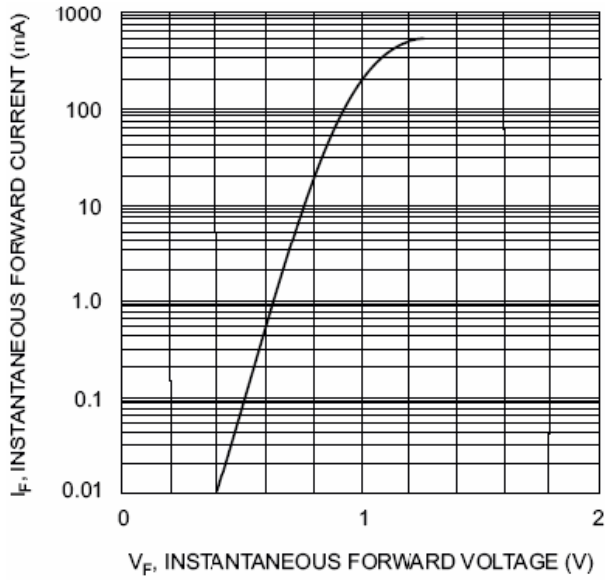
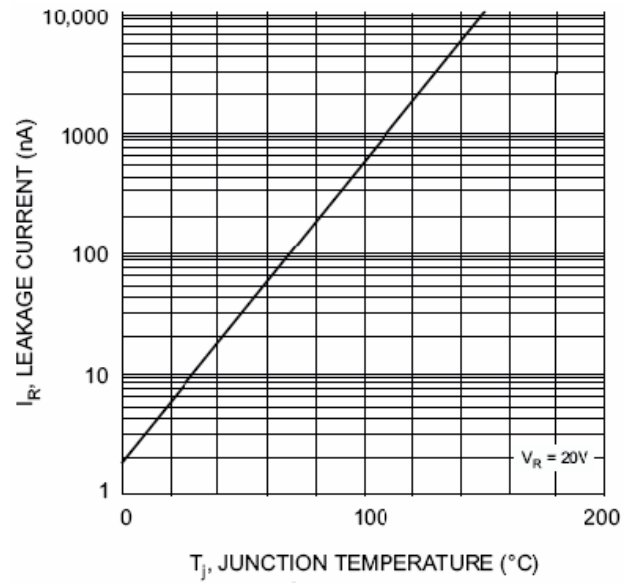


Fig.2 Typical Reverse Characteristics



Device Marking :

Device P/N	Marking code	Equivalent Circuit Diagram
BAV16W	T6	

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