

# BAV16WS, BAV19WS, BAV20WS, BAV21WS

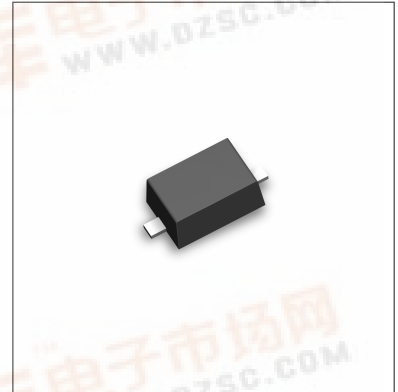


## SURFACT MOUNT SWITCHING DIODES

<b>VOLTAGE</b>	75-200 Volts	<b>POWER</b>	200 mWatts	<b>PACKAGE</b>	SOD-323
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### FEATURES

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance



### MECHANICAL DATA

Case: SOD-323, Plastic  
 Terminals: Solderable per MIL-STD-202, Method 208  
 Approx. Weight: 0.008 gram  
 Marking: A6, A8, A80, A82

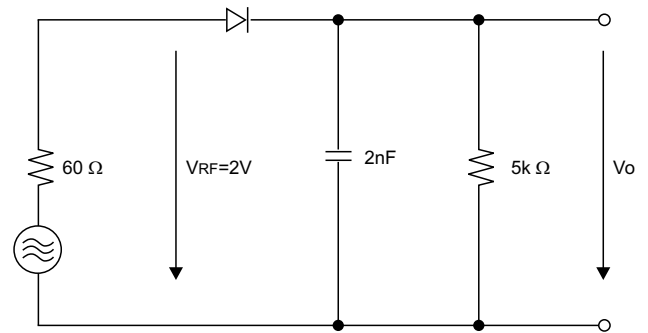
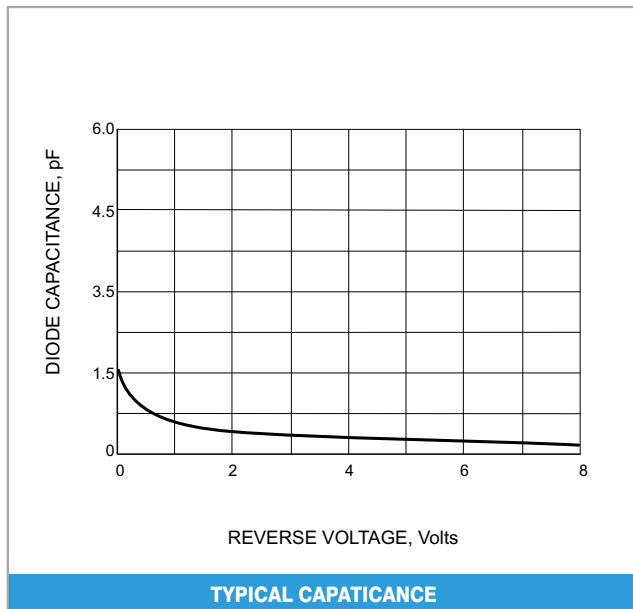
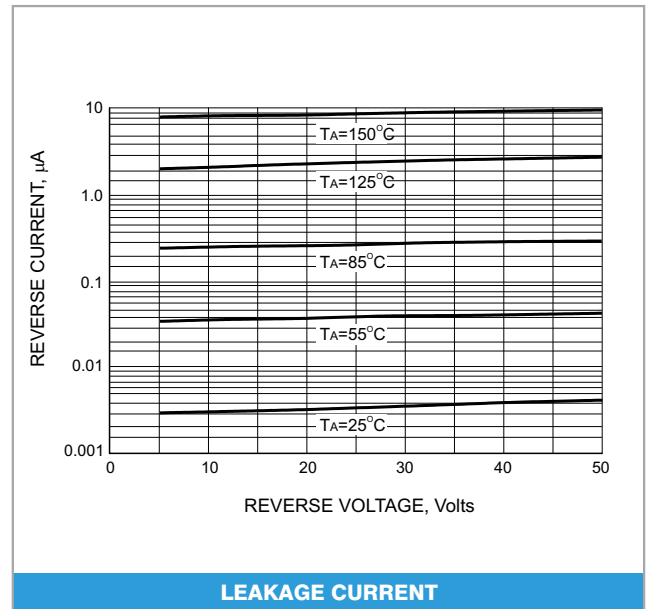
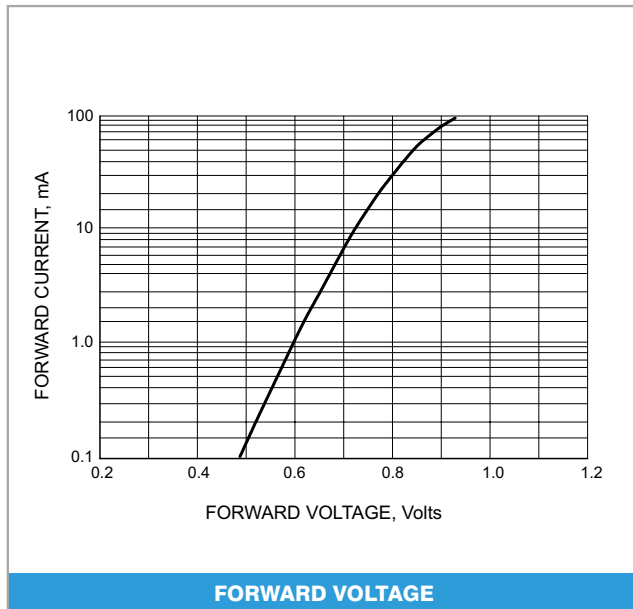
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	BAV16WS	BAV19WS	BAV20WS	BAV21WS	UNITS
Reverse Voltage	V <sub>R</sub>	75	100	150	200	V
Peak Reverse Voltage	V <sub>RM</sub>	100	120	200	250	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and f >=50 Hz	I <sub>o</sub>	250	200	200	200	mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	2.0	2.5	2.5	2.5	A
Power Dissipation Derate Above 25°C	P <sub>TOT</sub>	200	200	200	200	mW
Maximum Forward Voltage @ I <sub>F</sub> =100 mA	V <sub>F</sub>	0.855 @ I <sub>F</sub> =10 mA	1.0	1.0	1.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> = 25°C	I <sub>R</sub>	1.0	0.1	0.1	0.1	µA
Typical Junction Capacitance( Notes1)	C <sub>J</sub>	2.0	1.5	1.5	1.5	pF
Maximum Reverse Recovery (Notes2)	T <sub>RR</sub>	6.0	50	50	50	ns
Maximum Thermal Resistance	RθJA	357				°C / W
Storage Temperature Range	T <sub>J</sub>	-55 TO +125				°C

NOTE:  
 1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ  
 2. From I<sub>F</sub>=10mA to I<sub>R</sub>=1mA, V<sub>R</sub>=6Volts, R<sub>L</sub>=100Ω





**RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT**

SOD-323

