

## SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 75 - 200 Volts

**POWER** 350-410 mW

### FEATURES

- Fast switching Speed
- Electrically Identical to Standard JEDEC
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion

### MECHANICAL DATA

Case: SOD-123, Plastic

Terminals: Solderable per MIL-STD-202, Method 208

Approx. Weight:0.01 gram



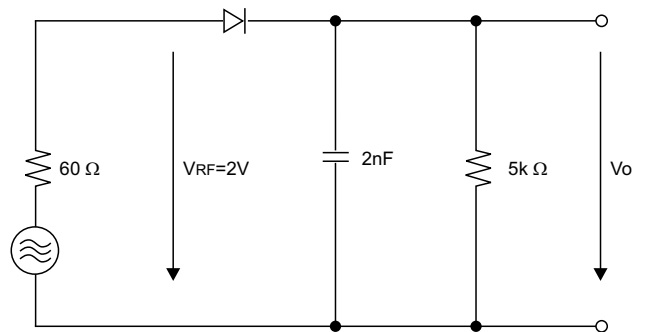
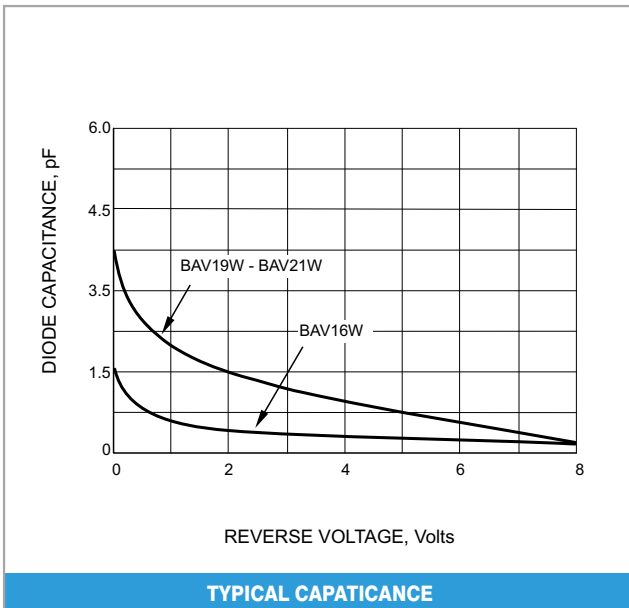
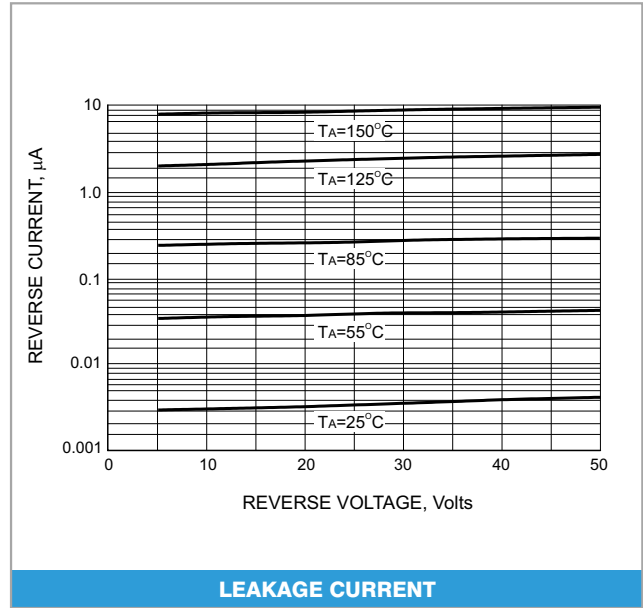
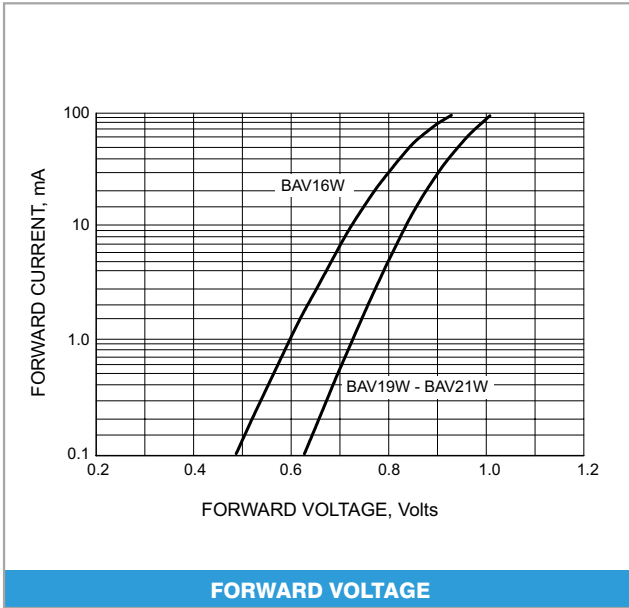
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	BAV16W	BAV19W	BAV20W	BAV21W	UNITS
Reverse Voltage	$V_R$	75	100	150	200	V
Peak Reverse Voltage	$V_{RM}$	100	120	200	250	V
Maximum RMS Voltage	$V_{RMS}$	35	85	140	175	V
Maximum DC Blocking Voltage	$V_{DC}$	75	100	150	200	V
Maximum Average Forward Current at $T_a=25^\circ\text{C}$	$I_{AV}$	250	200	200	200	mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	2	2.5	2.5	2.5	A
Power Dissipation Derate Above $25^\circ\text{C}$	$P_{TOT}$	350	410	410	410	mW
Maximum Forward Voltage @ $I_F=10\text{mA}$ @ $I_F=100\text{mA}$	$V_F$	0.855 -	- 1.0	- 1.0	- 1.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^\circ\text{C}$	$I_R$	1	0.1	0.1	0.1	$\mu\text{A}$
Typical Junction Capacitance( Notes1)	$C_J$	2	1.5	1.5	1.5	pF
Maximum Reverse Recovery (Notes2)	$T_{RR}$	6	50	50	50	ns
Maximum Thermal Resistance	$R_{\theta JA}$	450	375	375	375	$^\circ\text{C} / \text{W}$
Storage Temperature Range	$T_J$	-55 TO +125				$^\circ\text{C}$

NOTE:

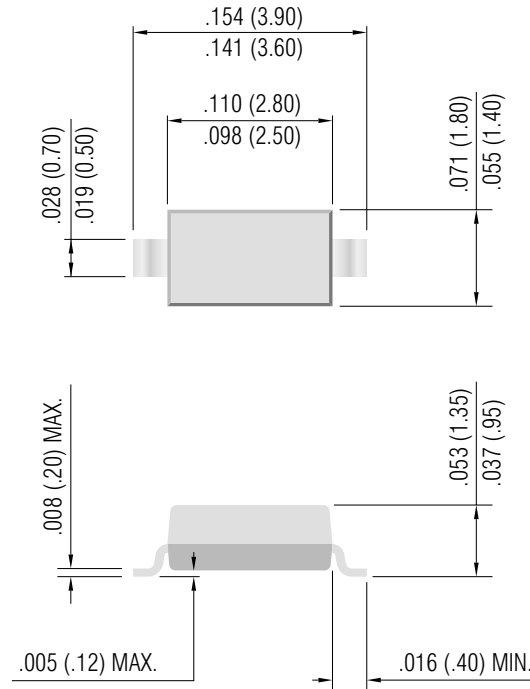
1.  $C_J$  at  $V_R=0$ ,  $f=1\text{MHZ}$

2. From  $I_F=10\text{mA}$  to  $I_R=1\text{mA}$ ,  $V_R=6\text{Volts}$ ,  $R_L=100\Omega$



**RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT**

SOD-123



Dimensions in inches and (millimeters)

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