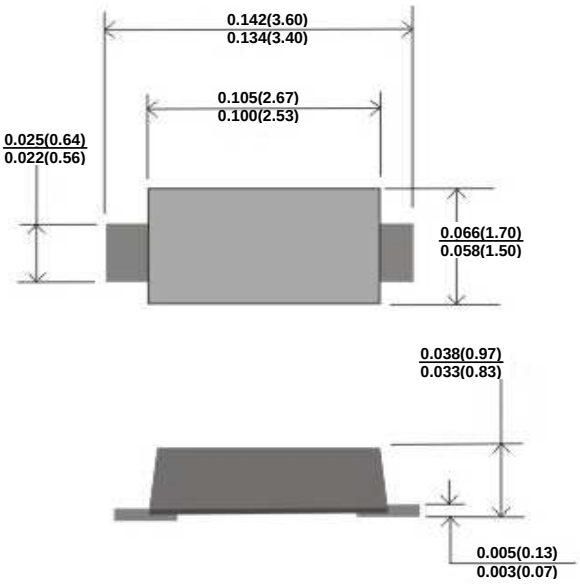
BAV16WL, BAV19WL, BAV20WL, BAV21WL

Surface Mount Switching Diodes

Voltage 75 to 200 Volts Power 200 mWatts

SOD-123L



Dimensions in inches and (millimeters)

FEATURES

- Fast switching speed
- Electrically identical to standerd JEDEC
- High Conductance
- Surface mount package ideally suited for automatic insertion

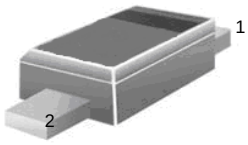
MECHANICAL DATA

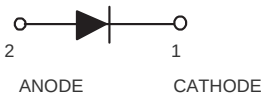
Case: JEDEC SOD-123L, Molded plastic over passivated junction

Terminals: Solderable per MIL-STD-750，Method 2026

Approx. Weight: 0.008 gram

Marking codes : A6, A8, A80, A82





MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwis e specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

PARAMETER	*SYMBOLS*	BAV16WL	BAV19WL	BAV20WL	BAV21WL	UNITS
Maximum Reverse Voltage	V_R	75	100	150	200	Volts
Peak Reverse Voltage	V_{RM}	100	120	200	250	Volts
Maximum RMS Voltage	V_{RMS}	35	85	140	175	Volts
Maximum DC Blocking Voltage	V_{DC}	75	100	150	200	Volts
Maximum Average Forward Current at T_A=25°C	$I_{(AV)}$	250	200	200	200	mA
Peak Forward Surge Current, tp = 1.0μs	I_{FSM}	2.0	2.5	2.5	2.5	Amps
Pow er Dissipation Derate Above 25°C	P_{TOT}	350	410	410	410	mW
Maximum Forward Voltage @IF=10mA @IF=100mA	V_F	0.855 —	— 1.0	— 1.0	— 1.0	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J=25°C	I_R	1.0	0.1	0.1	0.1	μA
Typical Junction Capacitance (Notes 1)	C_J	2.0	1.5	1.5	1.5	pF
Maximum Reverse Recovery (Notes 2)	t_{rr}	6	50	50	50	nS
Typical Thermal Resistance (NOTE 3)	$R_{\theta JA}$	450	375	375	375	℃/W
Junction Temperature and Storage Temperature Range	T_J, T_{STG}	-55 ～ +125				℃

Note: 1. C_J at Reverse Voltage = 0. f=1MHz

2. From I_F=30mA to I_R=-3mA. V_R=6V. Load=100Ω

3. Mounted with minimum recommended padsize，PCBoard FR4.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD DERATING CURVE

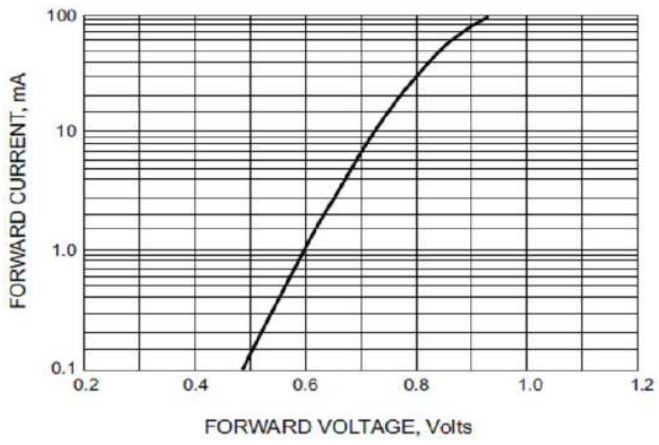


FIG. 2-TYPICAL CAPATICANCE RATINGS

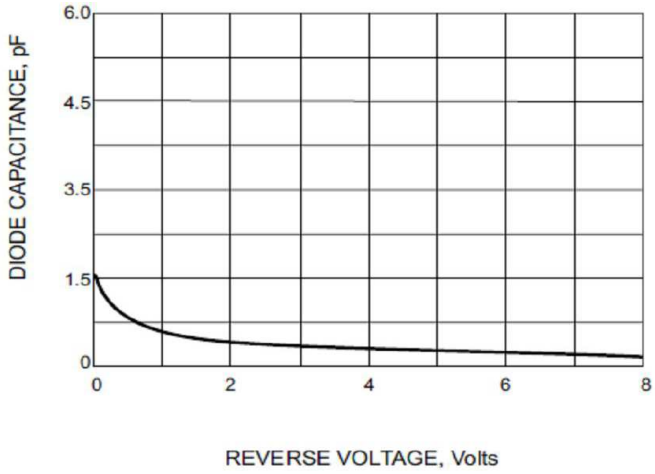
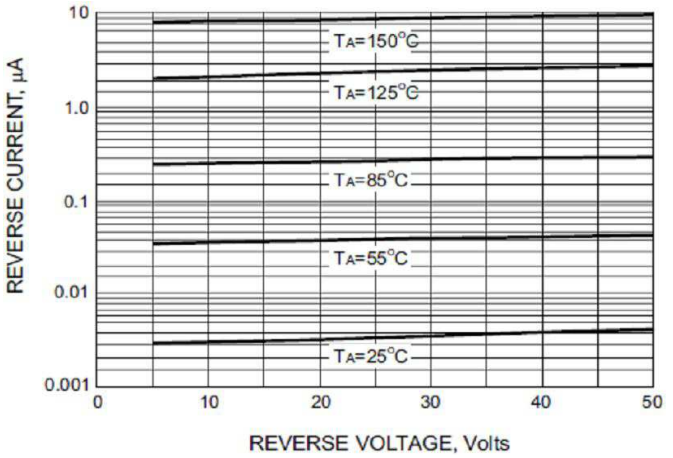
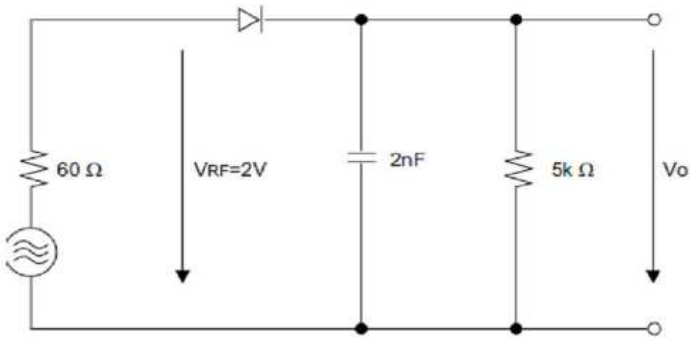


FIG. 3-TYPICAL REVERSE CHARACTERISTICS





RECTIFICATION EFFCIENCY MEASUREMENT CIRCUIT