BAV16W, BAV19W, BAV20W, BAV21W

Surface MountSwitching Diodes

Voltage 75 to 200 Volts Power 350 to 410 mWatts

FEATURES

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

SOD-123

MECHANICAL DATA

- Case: SOD-123 DO-35
- Terminals: Solderable per MIL-STD-202, Method 208
- Approx. weight: 0.01 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C unless otherwise noted

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 Ta=25°C	I_{AV}	250	200	200	200	mA
Peak Forward Surge Current, 1.0ms	I_{FSM}	2.0	4.0	4.0	4.0	A
Power Dissipation Derate Above 25°C	P_{tot}	350	400	400	400	mW
Maximum Forward Voltage @I_F=10mA @I_F=100mA	V_F	0.855 -	- 1.0	- 1.0	- 1.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J=25°C	I_R	1	0.1	0.1	0.1	μA
Typical Junction Capacitance (Notes1)	C_J	2.0	5.0	5.0	5.0	pF
Maximum Reverse Recovery (Notes2)	t_{rr}	6	50	50	50	ns
Maximum Thermal Resistance	$R_{\theta JA}$	450	375	375	375	°C/W
Storage Temperature Range	T_J , T_{ST}	-55 to + 125				°C

NOTE : 1. CJ at Reverse Voltage = 0. f=1MHz

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

Characteristic and Rating Curve

Fig.1 Forward Voltage

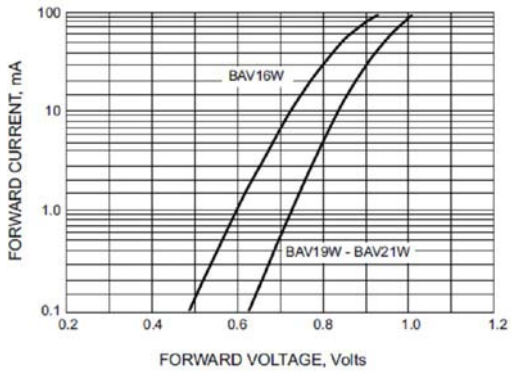


Fig.2 Leakage Current

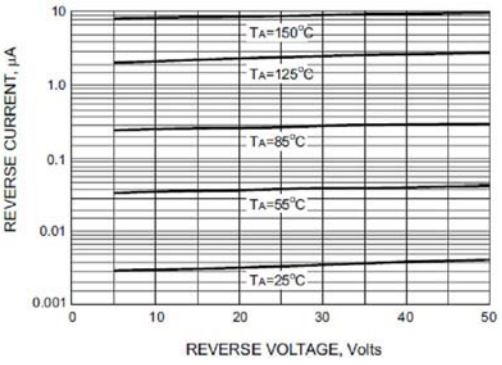
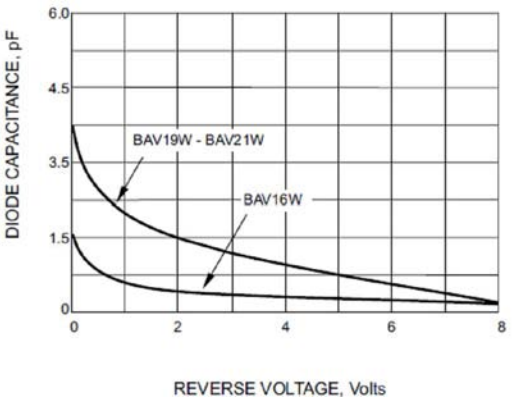
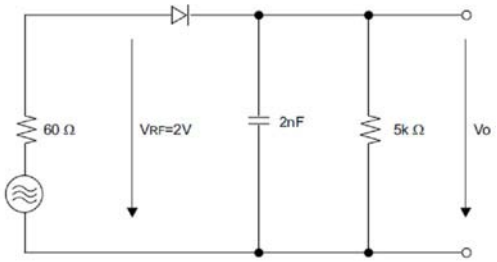


Fig.3 Typical Capaticance





RECTIFICATION EFFCIENCY MEASUREMENT CIRCUIT