



DATA SHEET

BAV16WS

SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100 Volts **POWER** 200mWatts

SOD-323 Unit: inch (mm)

FEATURES

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

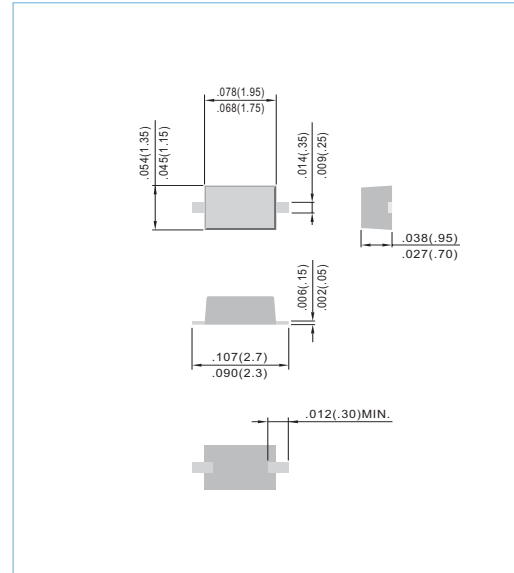
MECHANICAL DATA

Case: SOD-323, Plastic

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

Approx. Weight: 0.008 gram

Marking Code: A6



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

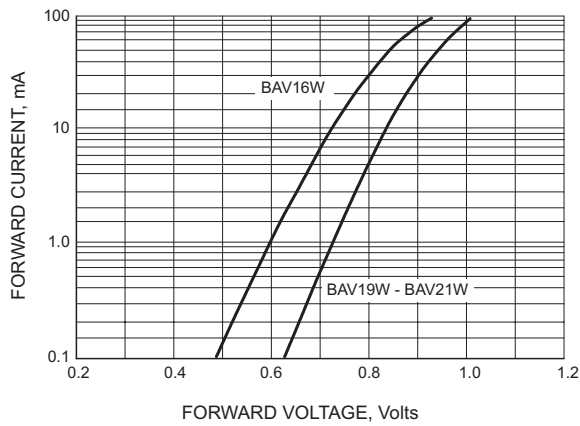
For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	BAV16WS	UNITS
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and $f \geq 50$ Hz	I_o	250	mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	2.0	A
Power Dissipation Derate Above 25°C	P_{TOT}	200	mW
Maximum Forward Voltage @ $I_F=0.01A$	V_F	0.855	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J= 25^\circ C$	I_R	1.0	μA
Typical Junction Capacitance(Notes1)	C_J	2.0	pF
Maximum Reverse Recovery (Notes2)	T_{RR}	6.0	ns
Maximum Thermal Resistance	$R_{\theta JA}$	357	$^\circ C / W$
Storage Temperature Range	T_J	-55 TO +125	$^\circ C$

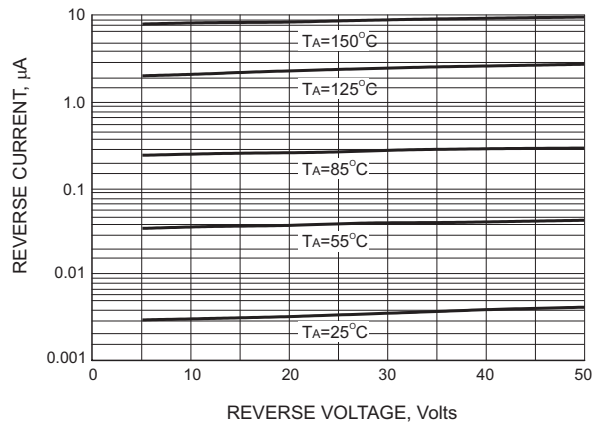
NOTE:

1. C_J at $V_R=0$, $f=1MHz$

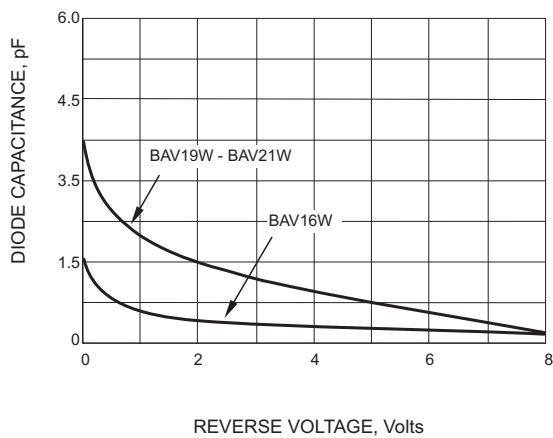
2. From $I_F=10mA$ to $I_R=1mA$, $V_R=6Volts$, $R_L=100\Omega$



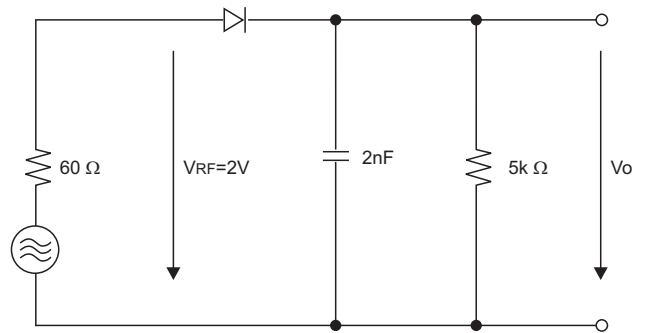
FORWARD VOLTAGE



LEAKAGE CURRENT



TYPICAL CAPACITANCE



RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT