

BAL99W, BAW56W, BAV70W, BAV99W

## TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SWITCHING DIODES

VOLTAGE - 100 Volts

CURRENT - 0.15 Ampere

### FEATURES

- \* Surface Mount Package Ideally Suited for Automatic Insertion
- \* Low power loss, high efficiency
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability

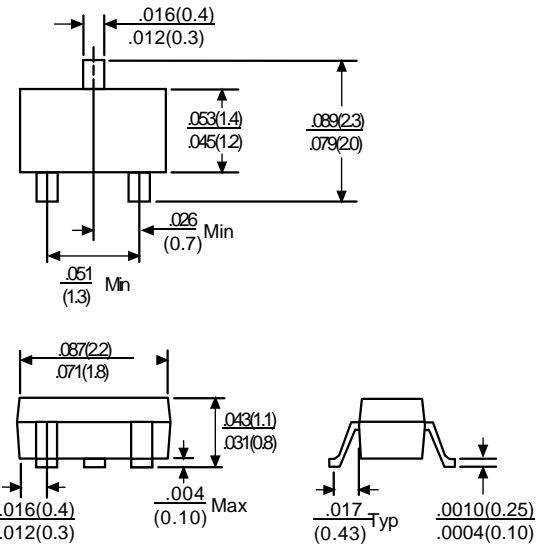
### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
- \* Mounting position: Any
- \* Weight: 0.008 grams Approx.

**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%.



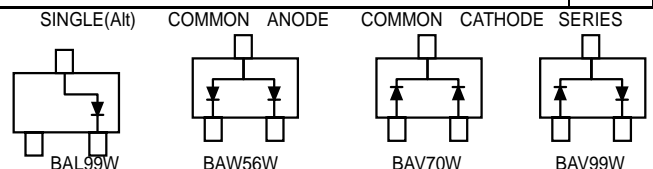
SOT-323



Dimensions in inches and (millimeters)

	SYMBOL	BAL99W	BAW56W	BAV70W	BAV99W	UNITS
Maximum Reverse Voltage	VR			75		V
Maximum Recurrent Peak Reverse Voltage	VRRM			100		V
Maximum Average Rectified Current	Io			150		mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM			2.0		A
Maximum Power Dissipation Tamb=25°C	Ptot			200		mW
Maximum Forward Voltage (@IF=10mA)	VF			1.0		V
Maximum Reverse Current (@VR=VR Max)	IR			2.5		μA
Maximum Reverse Recovery Time(Note 1)	trr			6.0		nS
Typical Junction Capacitance(Note 2)	CJ			4.0		pF
Typical Thermal Resistance	RθJA			357		°C/W
Operating and Storage Temperature Range	TJ,TSTG			-55 to +125		°C

Note: 1. Test Conditions: IF=IR=10mA, RL=100Ω, VR=6V to IR=1mA, RL=100Ω  
 2. Measured at 1MHz and VR=0



Pin Configuration (Top View)

# RATING AND CHARACTERISTIC CURVES (BAL99W, BAW56W, BAV70W, BAV99W)

FIG.1 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

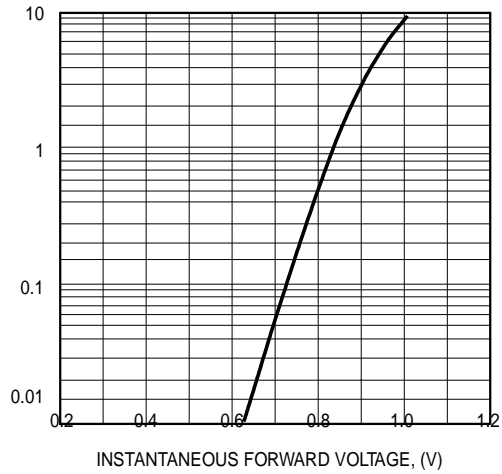


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

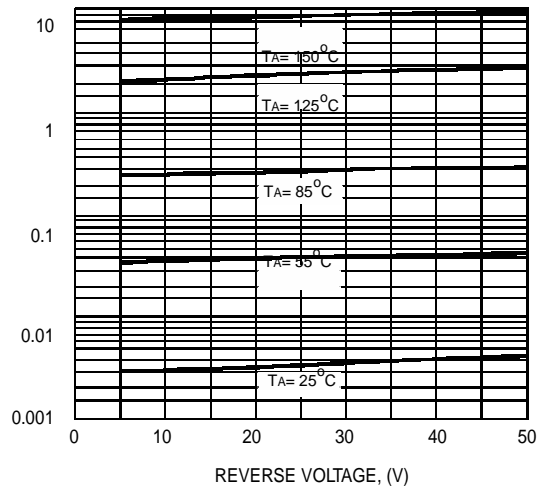


FIG.3 - TYPICAL JUNCTION CAPACITANCE

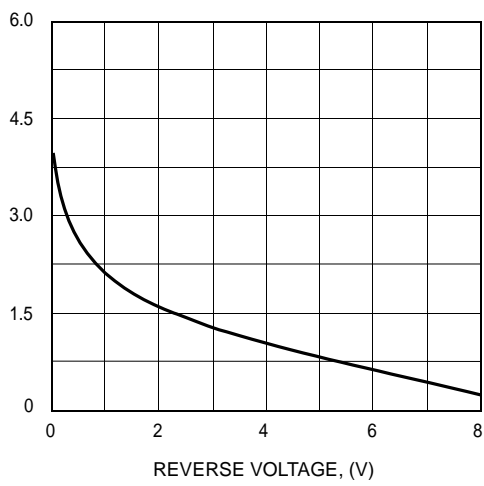


FIG.4 - RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT

