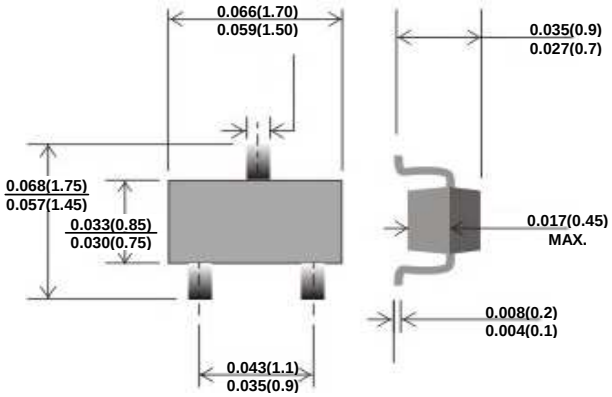
BAW56T, BAV70T, BAV99T, BAL99T

Surface Mount Switching Diodes

Voltage 100 Volts Power 200 mWatts

SOT-523



Dimensions in inches and (millimeters)

FEATURES

- Fast switching speed
- Surface mount package Ideally Suited for Automatic insertion
- Electrically identical to standerd JEDEC
- High Conductance
- Lead free in comply with EU RoHS 2002/95/EC directives.

MECHANICAL DATA

Case: JEDEC SOT-523, Molded plastic over passivated junction

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

Approx. Weight: 0.002 ounces

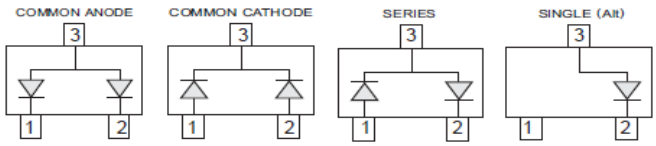
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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*	BAW56W	BAV70W	BAV99W	BAL99W	UNITS
Marking Code		LB	LC	LD	LF	Volts
Reverse Voltage	V_R	75				Volts
Peak Reverse Voltage	V_{RM}	100				Volts
Rectified Current (Average), Half Wave Rectification with Resistive Load and f >=50 Hz — Single Diode / Double Diode	I_O	150 75				mA
Peak Forward Surge Current, 1μs	I_{FSM}	4.0				Amps
Power Dissipation Derate Above 25°C	P_{TOT}	200				mW
Maximum Forward Voltage	V_F	0.715V @ I_F=0.001A 0.855V @ I_F=0.01A 1.0V @ I_F=0.05A 1.25V @ I_F=0.15A				V\
Maximum DC Reverse Current — at 25V / 75V	I_R	0.03 2.5				μA
Typical Junction Capacitance (Notes 1)	C_J	1.5				pF
Maximum Reverse Recovery Time (Notes 2)	t_{rr}	4.0				nS
Typical Thermal Resistance	$R_{\theta JA}$	833				℃/W
Junction Temperature and Storage Temperature Range	T_{STG}	-55 ～ +150				℃
Ci rcui t Fi gure		Common Anode	Common Cathode	Series	Single(Alt)	

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

2. From I_F=10mA to I_R=-1mA. V_R=6V. Load=100Ω



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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- TYPICAL FORWARD CHARTERISTICS

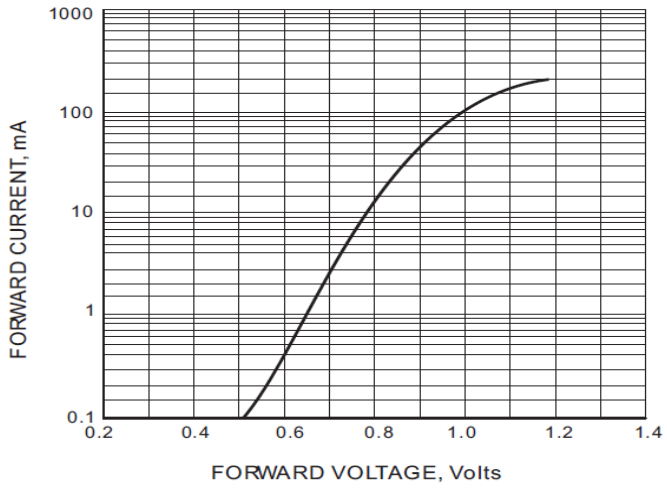


FIG. 2-TYPICAL REVERSE CHARTERISTICS

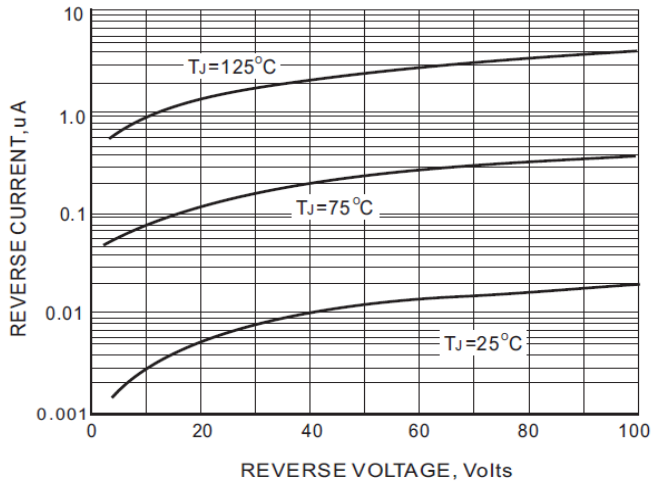


FIG. 3-TYPICAL JUNCTION CAPACITANCE

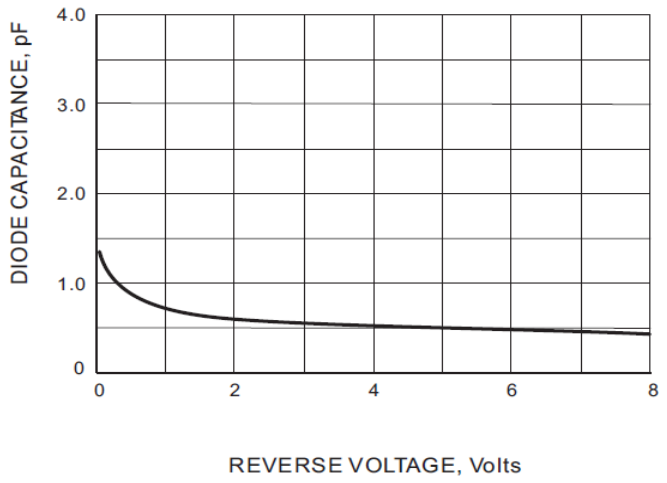
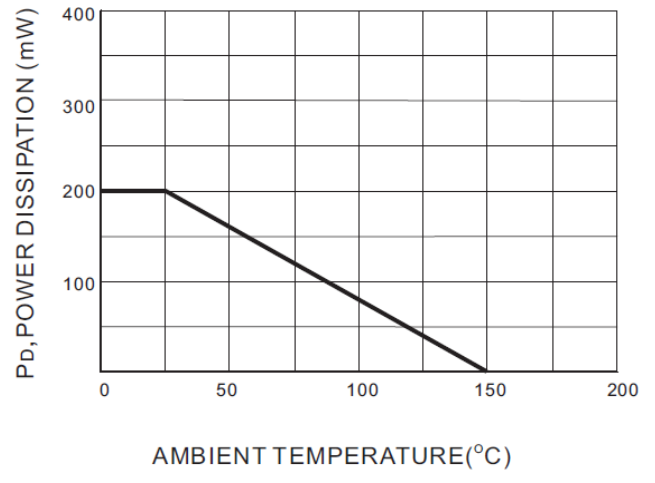


FIG. 4-POWER DERATING CURVE



MOUNTING PAD LAYOUT

Unit: Inch(mm)