

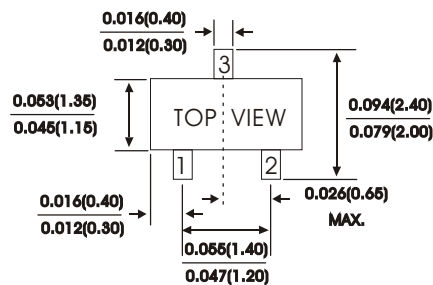
BAS16W THRU BAV99W

SMALL SIGNAL SCHOTTKY BARRIER DIODES

SOT-323(SC-70)

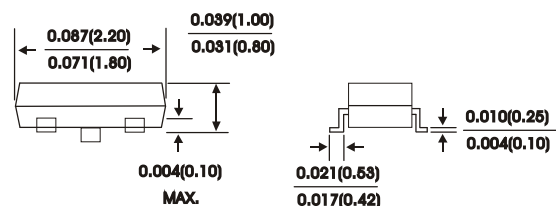
FEATURES:

- Low current leakage
- Low forward voltage
- Small outline surface mount SOT-23 PACKAGE



MECHANICAL DATA

Case : SOT-323 molded plastic



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%.

Characteristic	Symbol	BAS16W	BAV70W	BAW56W	BAV99W	Units
Reverse voltage	V_R	75	70	70	70	Volts
Minimum breakdown voltage	V_{RM}	75	70			Volts
Maximum average forward rectified current	$I_{(AV)}$	0.2			0.215	Amps
Non-repetitive peak forward current at 1s (Per leg)	I_{FSM}	0.5				Amps
Maximum instantaneous forward voltage (Per leg)	V_F		0.715	0.855	1.000	Volts
			1.250			
Maximum reverse current at (Per leg)	I_R	1.0 30 ---	2.5 30 ---	2.5 30 ---	2.5 30 ---	μA
		$V_R=75V / 25^\circ C$				
		$V_R=70V / 25^\circ C$				
		$V_R=25V / 150^\circ C$				
		$V_R=70V / 150^\circ C$				
Maximum reverse recover time(NOTE 1) (Per leg)	T_{RR}	6.0				nS
Maximum diode capacitance(NOTE 2)	C_D	2.0	1.5	2.0	1.5	P_F
Operating and storage temperature range	T_J, T_{Stg}	-55to+150				$^\circ C$

NOTES:

(1)Reverse Recovery Test CONDITION : $I_F=I_R=10mA$, $I_R(REC) = 1.0mA$, $V_R=5.0V$

(2)Measured at 1MHZ and reverse Voltage of 0.0V

RATINGS AND CHARACTERISTIC CURVES BAS16W THRU BAV99W

Device Marking


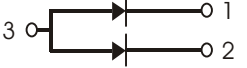
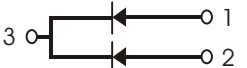
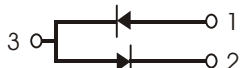
Item	Marking	Equivalent Circuit diagram
BAS16W	A6	
BAW56W	A1	
BAV70W	A4	
BAV99W	A7	

FIG.1 - TYPICAL REVERSE CHARACTERISTICS

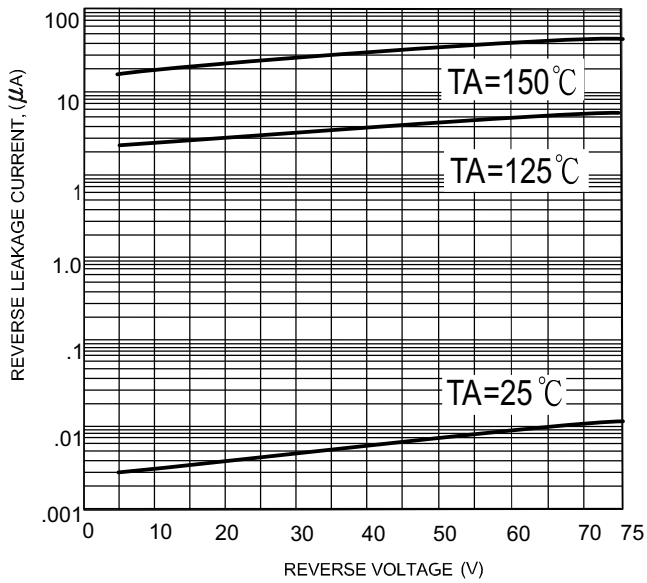


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

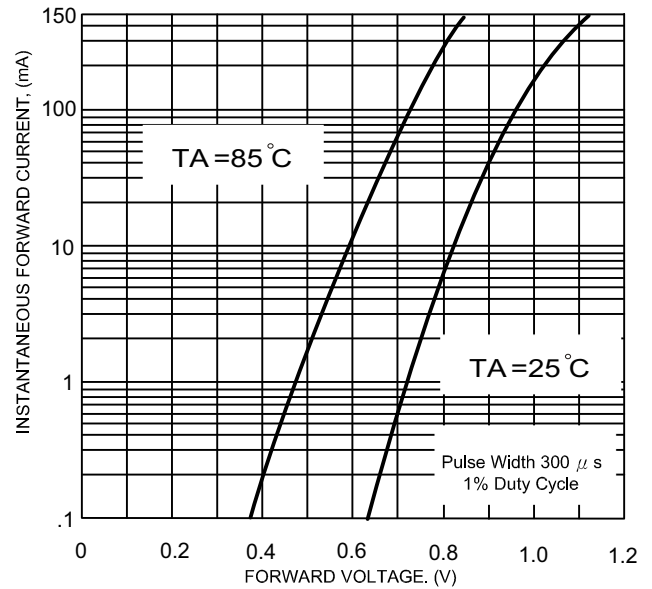


FIG.3-TYPICAL CAPACITANCE

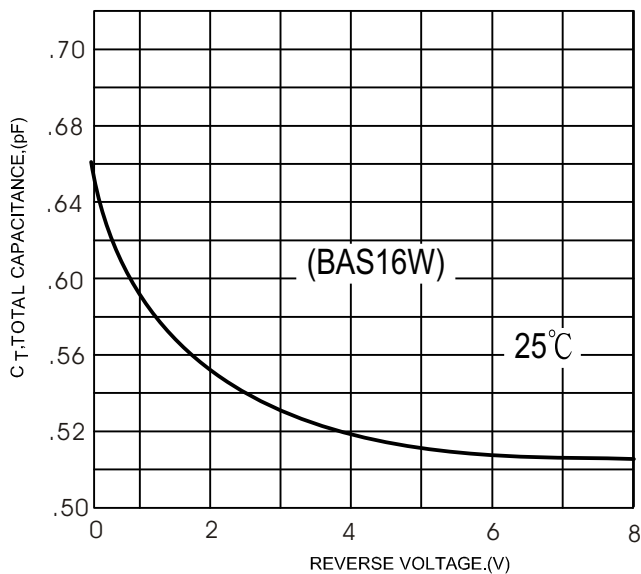


FIG.4-TYPICAL CAPACITANCE

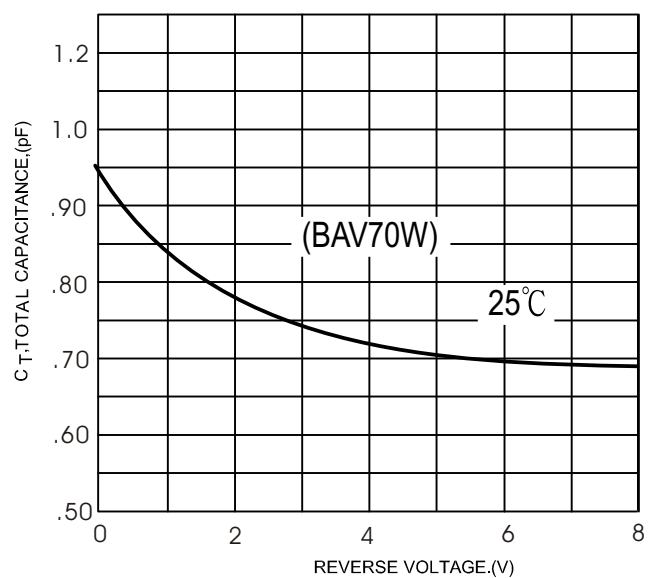


FIG.5-TYPICAL CAPACITANCE

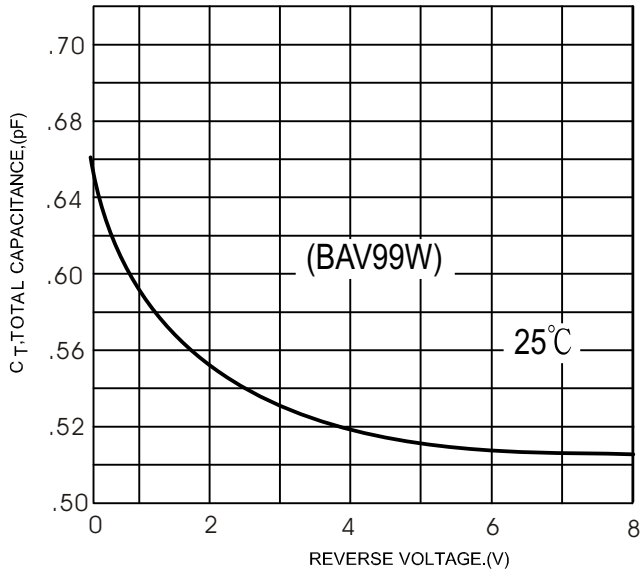


FIG.6-TYPICAL CAPACITANCE

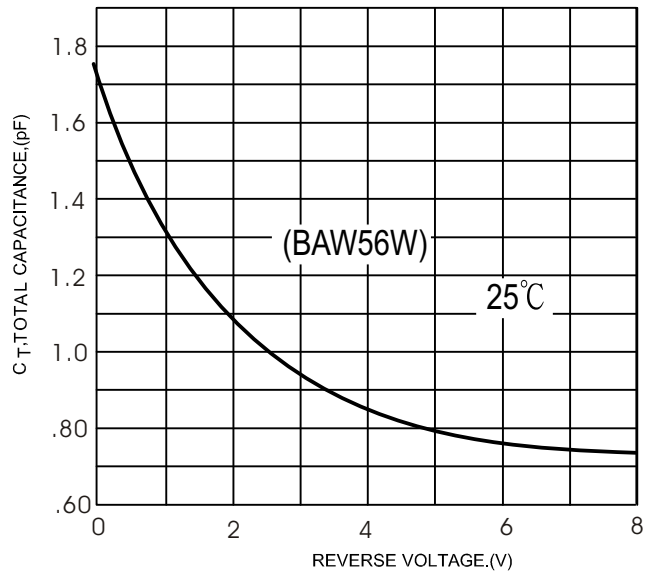
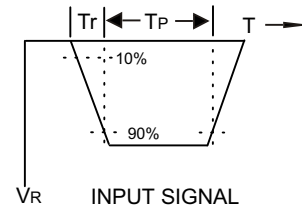
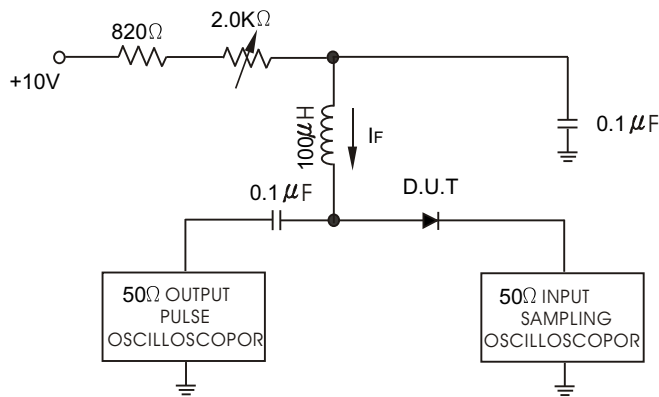
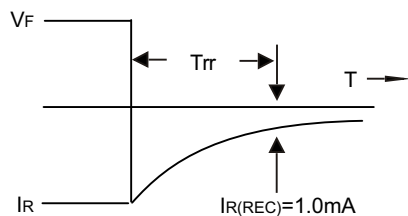


Figure 7 Recovery Test equivalent Circuit



- NOTES : 1.A 2.0K Variable resistor for forward current (IF) of 10mA
 2.Input pules is adjusted so IR(peak) is equal to 10mA
 3.tp" trr



OUTPUT PULSE

(IF=IR=10mA, MEASURED at IR(REC)=1.0mA)