

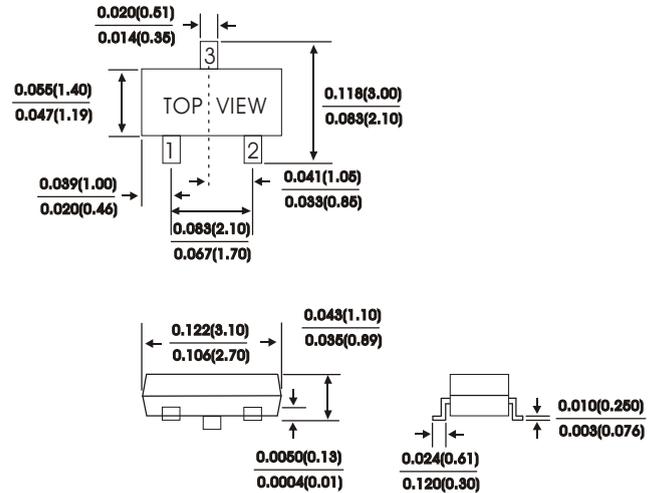


SMALL SIGNAL SCHOTTKY BARRIER DIODES

FEATURES:

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

SOT-23



MECHANICAL DATA

Case : SOT-23 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	BAS16	BAV70	BAW56	BAV99	Units
Reverse voltage	V_R	75	70	70	70	Volts
Minimum reverse voltage at $I_{BR}=100\mu A_{dc}$	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 1.250			Volts
Maximum reverse current at (Per leg)	I_R	1.0 30 50	2.5 60 100	2.5 30 50	2.5 30 50	μA
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				°C

NOTES:

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

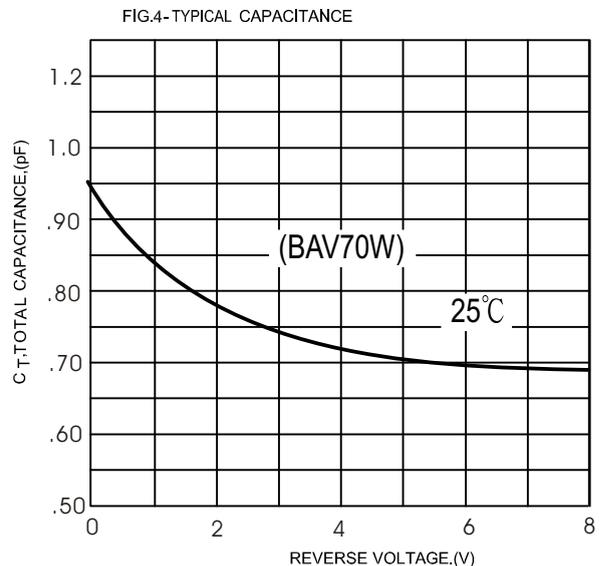
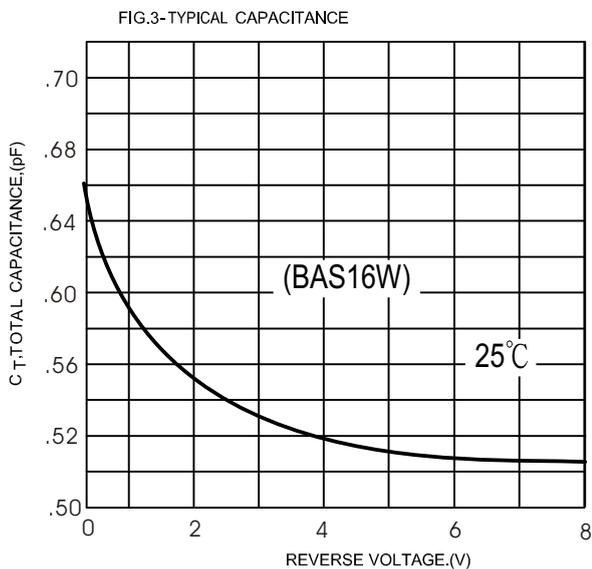
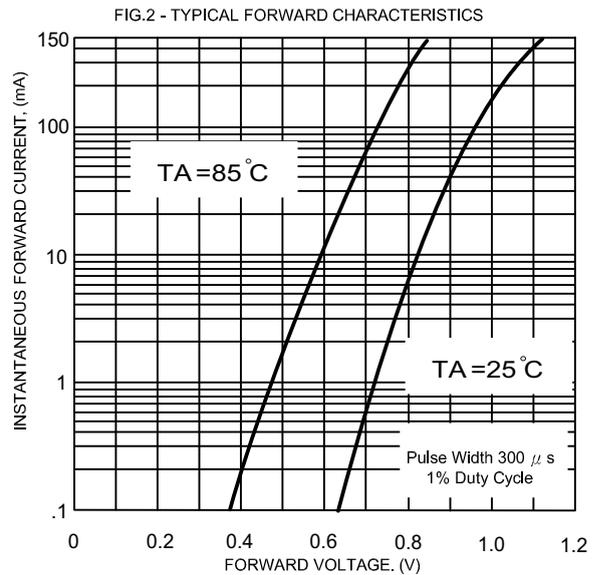
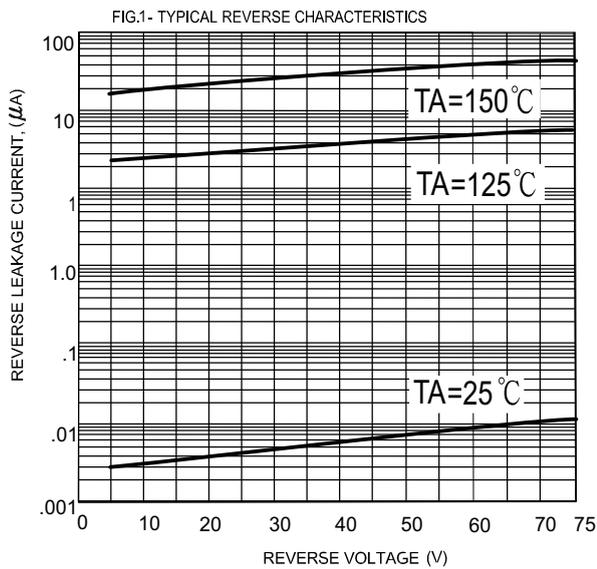
(2) Measured at 1MHZ and reverse Voltage of 0.0V



RATINGS AND CHARACTERISTIC CURVES

Device Marking

Item	Marking	Equivalent Circuit diagram
BAS16	A6,D2	
BAW56	A1	
BAV70	A4,5B	
BAV99	A7	





RATINGS AND CHARACTERISTIC CURVES

FIG.5-TYPICAL CAPACITANCE

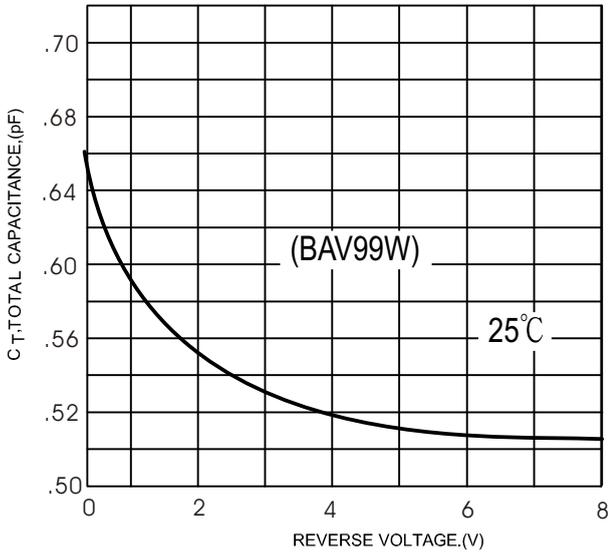


FIG.6-TYPICAL CAPACITANCE

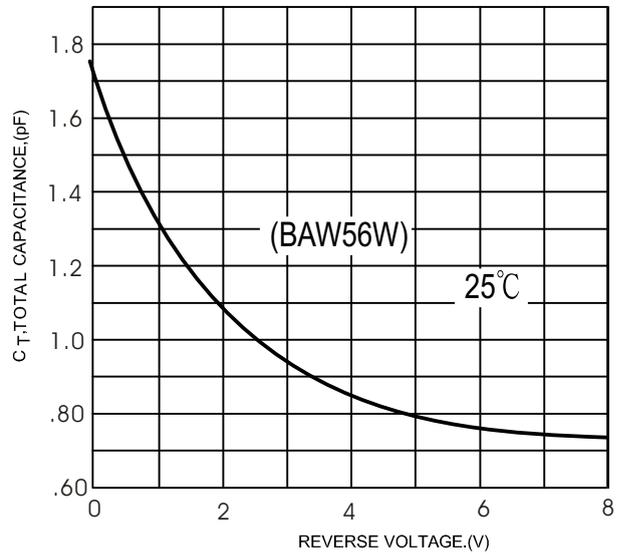
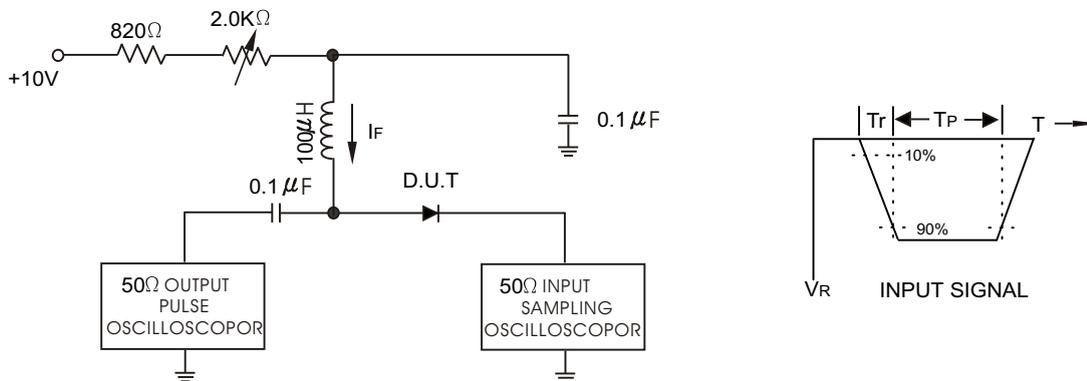
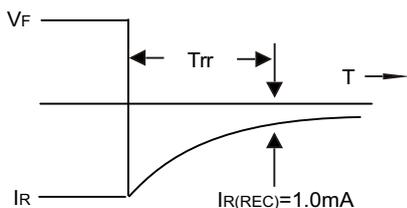


Figure 7 Recovery Test equivalent Circuit



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



OUTPUT PULSE
 (I_F=I_R=10mA, MEASURED
 at I_R(REC)=1.0mA)



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