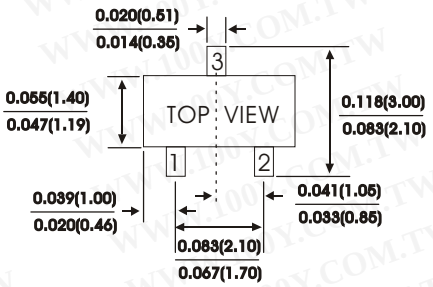
BAS16 THRU BAV99

SMALL SIGNAL SCHOTTKY BARRIER DIODES

FEATURES:

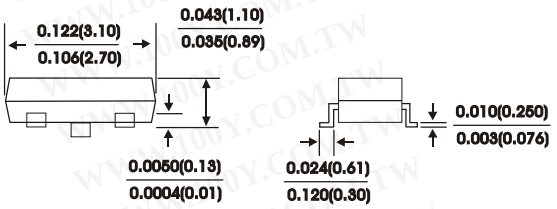
- Low current leakage
  Low forward voltage
- Small outline surface mount SOT-23
  PACKAGE

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}-100uAdc	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) IF=1.0mA IF=10mA IF=50mA IF=150mA	V_F	0.715 0.855 1.000 1.250				Volts
Maximum reverse current at (Per leg) V_R=75V / 25℃ V_R=70V / 25℃ V_R=25V / 150℃ V_R=75V / 150℃	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 capactitance (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				℃

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

Device Marking

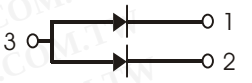
Item	Marking	Eqivalent Circuit diagram
BAS16	A6	
BAW56	A1	
BAV70	A4	
BAV99	A7	

FIG.1 - TYPICAL REVERSE CHARACTERISTICS

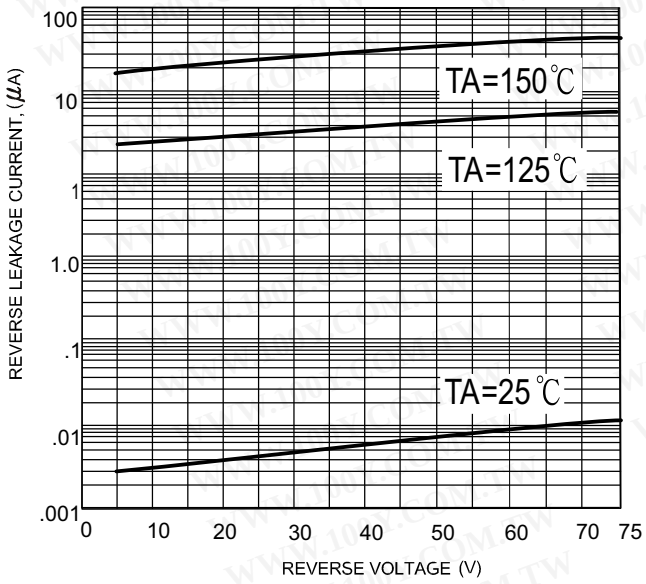


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

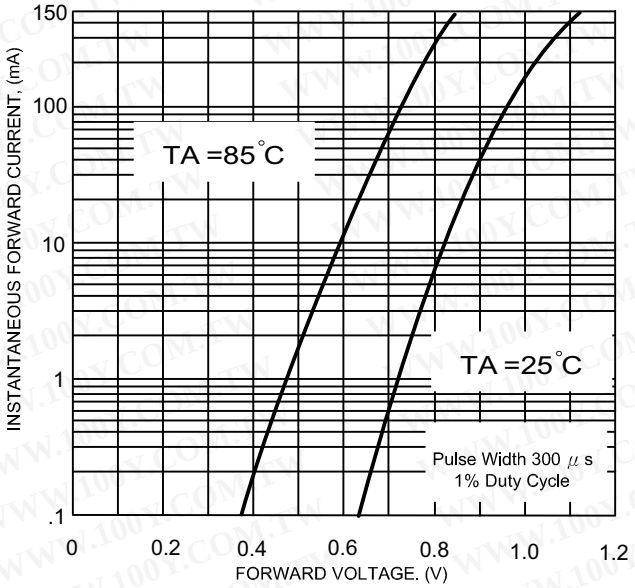


FIG.3-TYPICAL CAPACITANCE

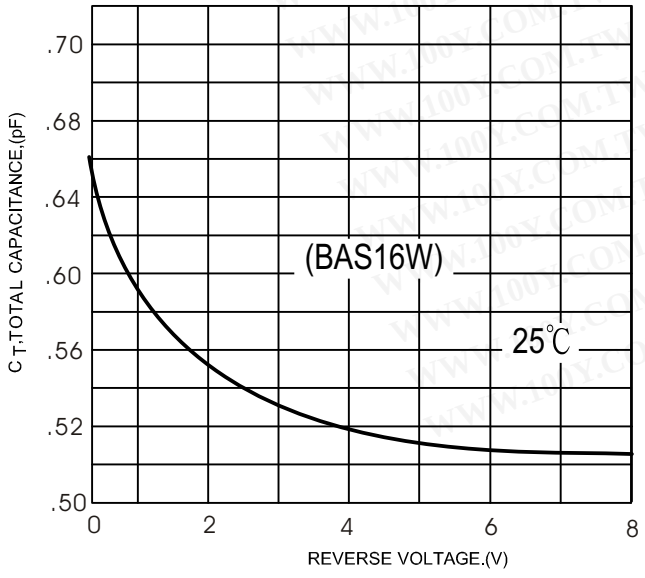
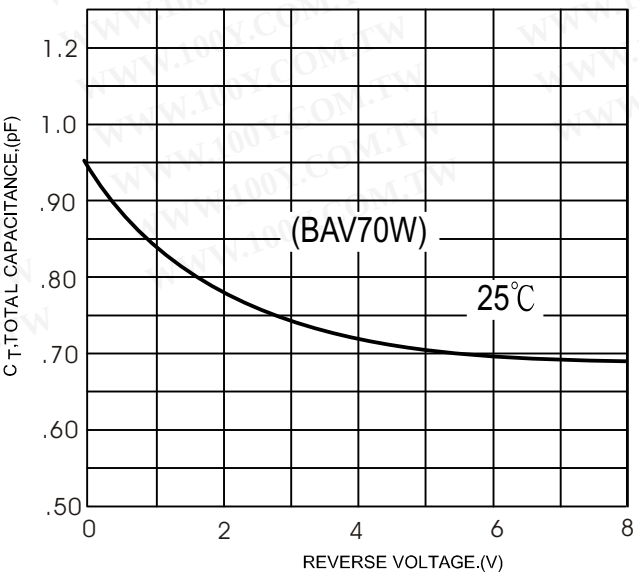


FIG.4-TYPICAL CAPACITANCE



DACO SEMICONDUCTOR

FIG.5- TYPICAL CAPACITANCE

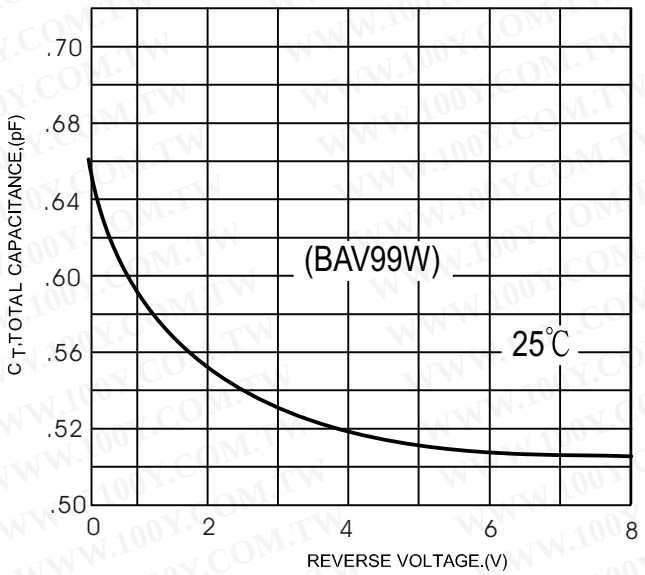


FIG.6- TYPICAL CAPACITANCE

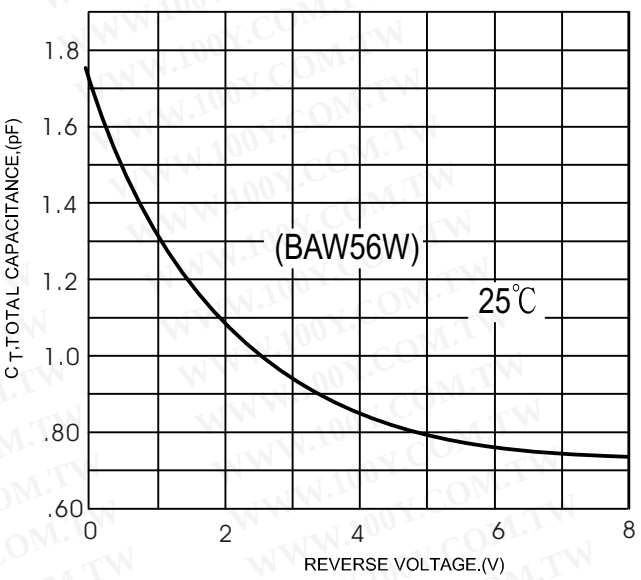
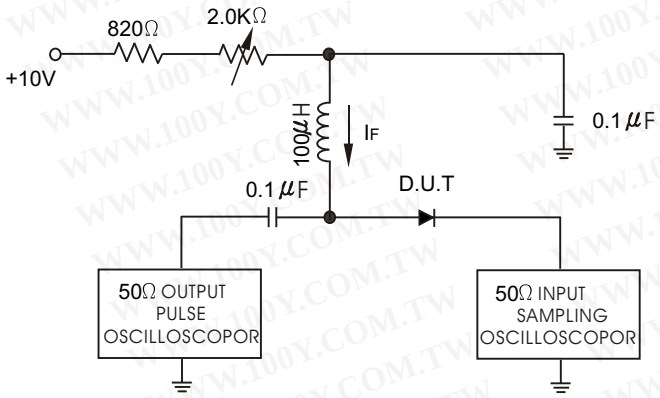
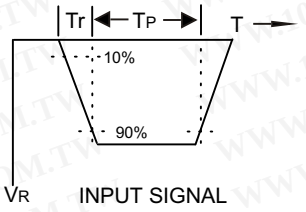
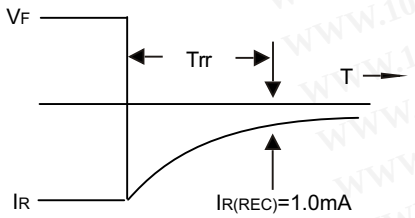


Figure 7 Recovery Test equivalent Circuit





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)