DATA SHEET

BAV70

SURFACE MOUNT SWITCHING DIODES

VOLTAGE **70 V** **POWER** **350 mW**

FEATURES

- FAST SWITCHING SPEED
- ELECTRICALLY IDENTICAL TO STANDARD JEDEC
- HIGH CONDUCTANCE
- SURFACE MOUNT PACKAGE IDEALLY SUITED FOR AUTOMATIC INSERTION
- LEAD FREE AND HALOGEN-FREE

MECHANICAL DATA

- CASE: SOT-23 PLASTIC CASE
- TERMINALS: SOLDERABLE PER MIL-STD-202, METHOD208
- APPROX.WEIGHT: 0.008 GRAMS

CASE: SOT-23

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED.

PARAMETER	SYMBOL	VALUE	UNITS
MAXIMUM REVERSE VOLTAGE	V_R	70	V
PEAK REVERSE VOLTAGE	V_{RM}	100	V
PEAK FORWARD CURRENT	I_F	200	mA
PEAK FORWARD SURGE CURRENT (tp=1mS)	I_{FSM}	1000	mA
REPETITIVE PEAK FORWARD CURRENT	I_{FRM}	450	mA
PEAK FORWARD SURGE CURRENT	I_{FM}	500	mA
POWER DISSIPATION DERATE ABOVE 25°C	P_{TOT}	350	mW
JUNCTION TEMPERATURE	T_J	150	°C
STORAGE TEMPERATURE	T_{STG}	-65~ +150	°C

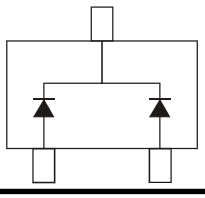
ELECTRICAL CHARACTERISTICS (AT T_A =25°C UNLESS OTHERWISE NOTED)

PARAMETER		SYMBOL	VALUE	UNITS
MAXIMUM FORWARD VOLTAGE	I_F=1mA	V_F	0.715	V
	I_F=10mA		0.855	
	I_F=50mA		1.0	
	I_F=150mA		1.25	
REVERSE CURRENT	V_R=70V	I_R	2.5	µA
	V_R=25V (T_J=150°C)		60	
	V_R=70V (T_J=150°C)		100	
JUNCTION CAPACITANCE (NOTE.1)		C_J	1.5	pF
REVERSE RECOVERY TIME (NOTE.2)		T_{RR}	6.0	nS

NOTE:

1. C_J AT V_R=0, f =1MHz
2. FROM I_F=10mA TO I_R=1mA, V_R=6V, R_L=100Ω

COMMON CATHODE



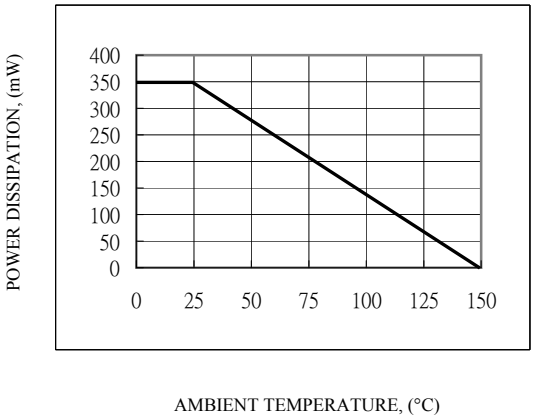


Fig.1-POWER DERATING CURVE

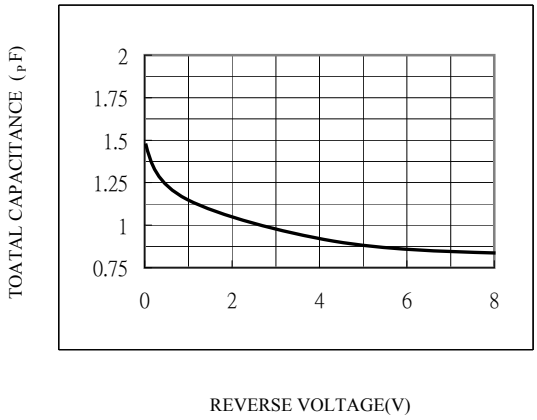


Fig.2-TYPICAL CAPACITANCE VS.REVERSE VOLTAGE

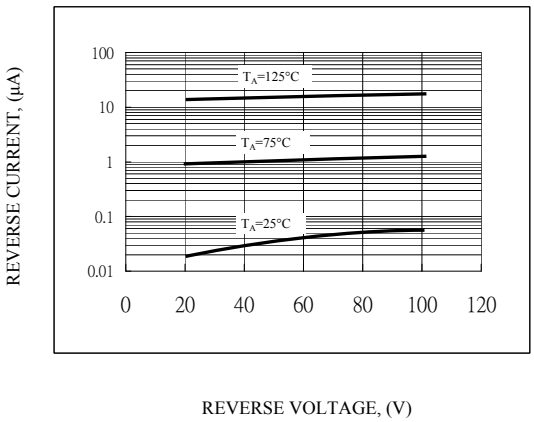


Fig.3- TYPICAL REVERSE CHARACTERISTICS

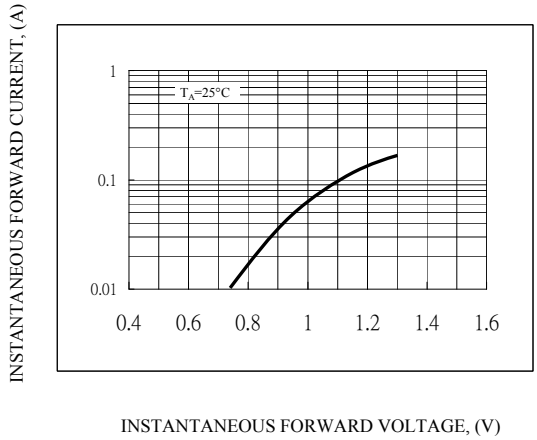
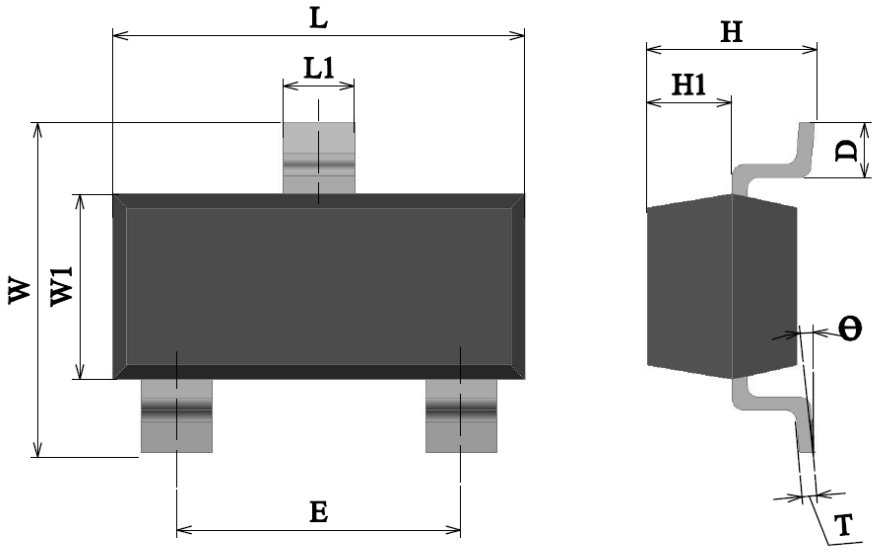


Fig.4- FORWARD CHARACTERISTIC

SOT-23 DIMENSION



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
L	2.80	3.10	0.110	0.122
L1	0.30	0.50	0.012	0.020
W	2.25	2.54	0.089	0.100
W1	1.20	1.40	0.047	0.055
E	1.80	2.00	0.071	0.079
H	0.90	1.15	0.035	0.045
H1	0.40	0.80	0.016	0.031
D	0.30	0.50	0.012	0.020
T	0.08	0.15	0.003	0.006
θ	0°	8°	0 °	8°