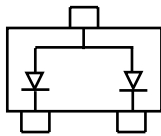


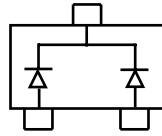
SOT-23

Features

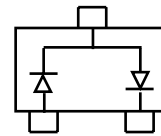
- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



BAW56 Marking: A1



BAV70 Marking: A4



BAV99 Marking: A7

Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Limits	Unit
Reverse voltage	V_R	70	V
Forward Current	I_F	200	mA
Peak Forward Surge Current	$I_{FM(surge)}$	500	mA
Power Dissipation	P_D	225	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	556	°C/W
Junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-55-150	°C

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified).

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V_R	70			V	$I_R=100\mu A$
Forward voltage	V_{F1}			0.715	V	$I_F=1mA$
	V_{F2}			0.855	V	$I_F=10mA$
	V_{F3}			1	V	$I_F=50mA$
	V_{F4}			1.25	V	$I_F=150mA$
Reverse current	I_R			2.5	μA	$V_R=70V$
Capacitance between terminals	C_T			1.5	pF	$V_R=0, f=1MHz$
Reverse recovery time	t_{rr}			6	ns	$I_F = I_R = 10mA,$ $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

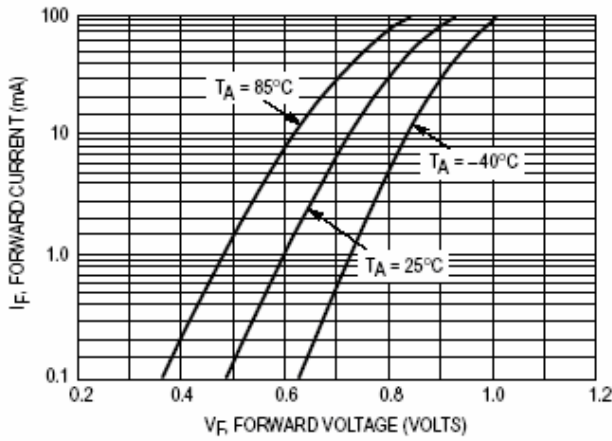


Figure 1. Forward Voltage

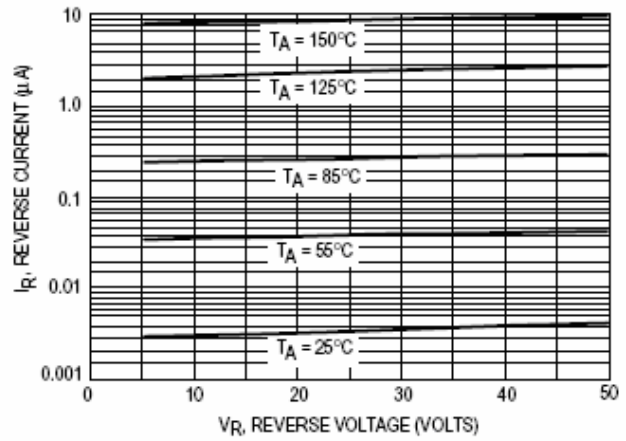


Figure 2 Leakage Current

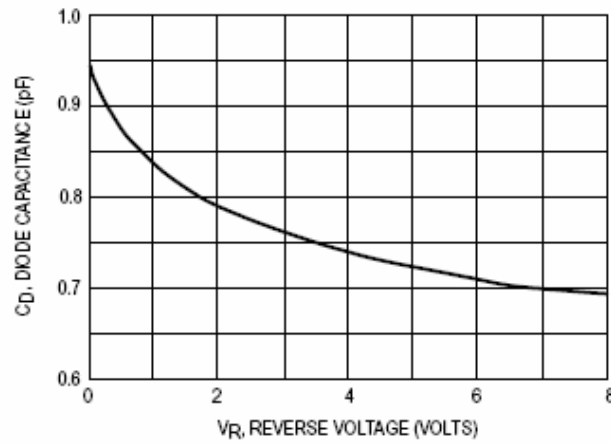
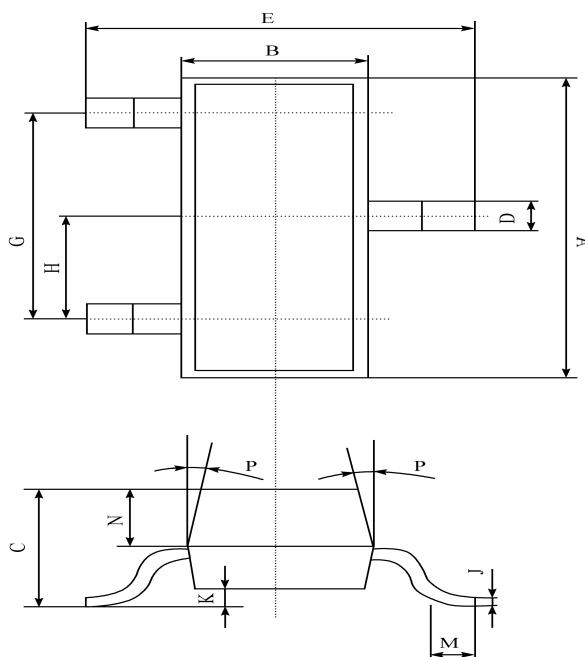


Figure 3 Capacitance

SOT-23 PACKAGE OUTLINE Plastic surface mounted package



SOT-23	
A	2.90 ± 0.10
B	1.30 ± 0.10
C	1.00 ± 0.10
D	0.40 ± 0.10
E	2.40 ± 0.20
G	1.90 ± 0.10
H	0.95 ± 0.05
J	0.13 ± 0.05
K	0.00-0.10
M	≧ 0.2
N	0.60 ± 0.10
P	7 ± 2°

(UNIT): mm