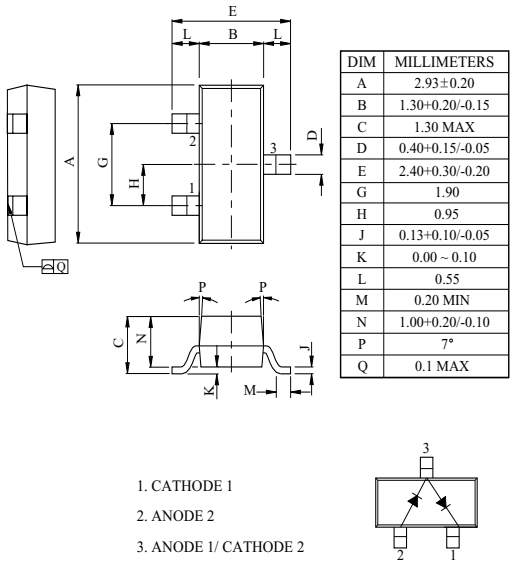
BAV23S

SILICON EPITAXIAL PLANAR DIODE

High Voltage Switching.

FEATURES

- Low Leakage Current.
- Repetitive Peak Reverse Voltage : $V_{RRM} \leqq 250V$.
- Low Capacitance : $C_T \leqq 2pF$.



DIM	MILLIMETERS
A	2.93±0.20
B	1.30+0.20/-0.15
C	1.30 MAX
D	0.40+0.15/-0.05
E	2.40+0.30/-0.20
G	1.90
H	0.95
J	0.13+0.10/-0.05
K	0.00 ~ 0.10
L	0.55
M	0.20 MIN
N	1.00+0.20/-0.10
P	7°
Q	0.1 MAX

1. CATHODE 1
2. ANODE 2
3. ANODE 1/ CATHODE 2

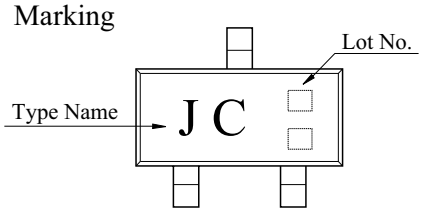
SOT-23

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Maximum (Peak) Reverse Voltage		V_{RM}	250	V
Reverse Voltage		V_R	200	V
Maximum (Peak) Forward Current		I_{FM}	625	mA
Forward Current	Single diode loaded.	I_F	225	mA
	Double diode loaded.		125	
Surge Current (Square wave)	t = 1 μs	I_{FSM}	9	A
	t = 100 μs		3	A
	t = 10ms		1.7	A
Power Dissipation		P_D	250*	mW
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55 150	℃

Note : * Device mounted on a FR4 Printed-Circuit Board (PCB)

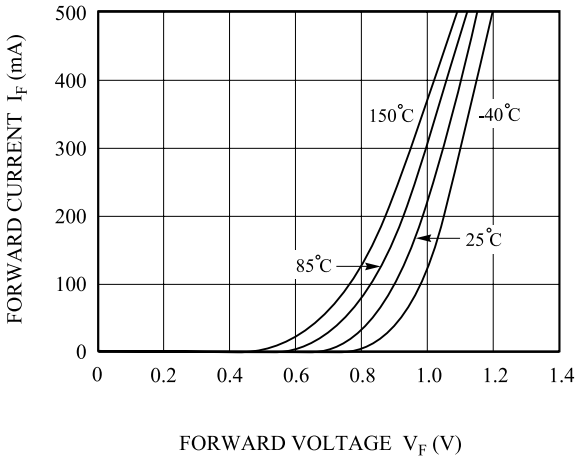
Marking



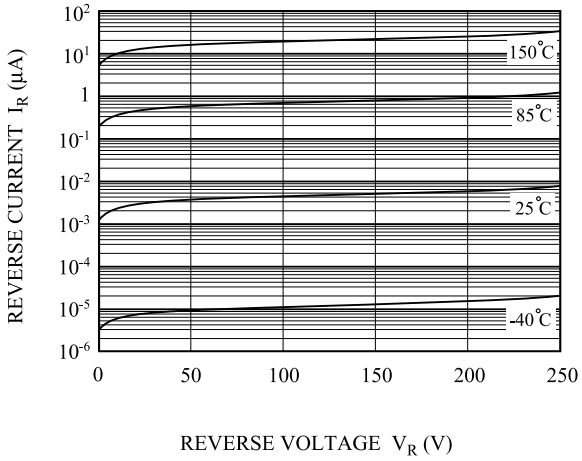
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	V_F	I_F=100mA	-	-	1.0	V
		I_F=200mA	-	-	1.25	
Reverse Current	I_R	V_R=200V	-	-	0.1	μA
		V_R=200V, T_j=150℃	-	-	100	
Total Capacitance	C_T	V_R=0V, f=1MHz	-	-	2	pF
Reverse Recovery Time	t_{rr}	I_F=10mA, I_R=10mA, I_{RM}=1mA	-	-	50	ns

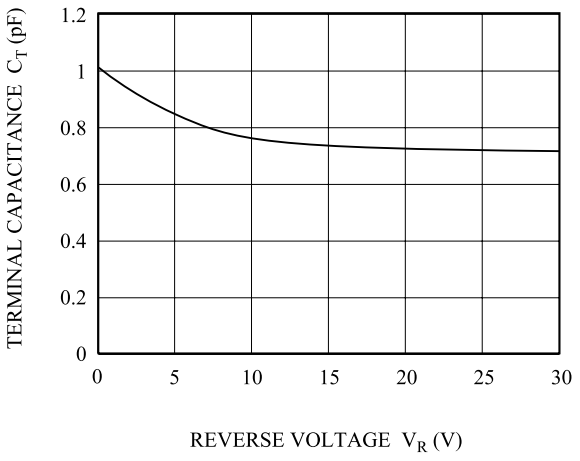
I_F - V_F



I_R - V_R



C_T - V_R



I_F - T_a

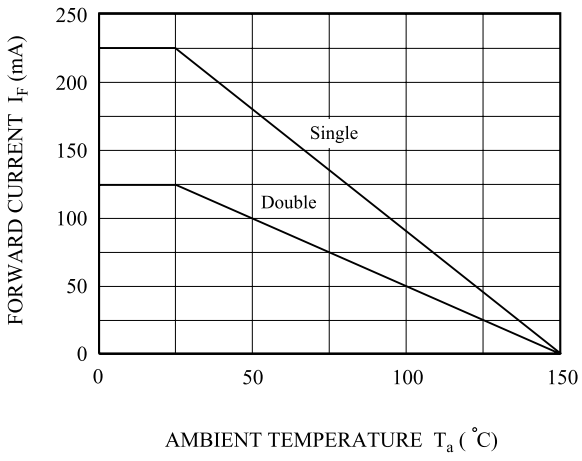


Fig. 1. REVERSE RECOVERY TIME(t_{rr}) TEST CIRCUIT