

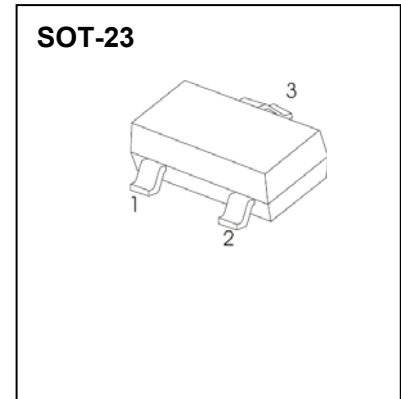
SOT-23 Plastic-Encapsulate Transistors

BAV23A/C/S

SWITCHING DIODE

FEATURES

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



BAV23A	BAV23C	BAV23S
MARKING: KT7	MARKING: KT6	MARKING: KL31

Solid dot = Green molding compound device, if none, the normal device

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

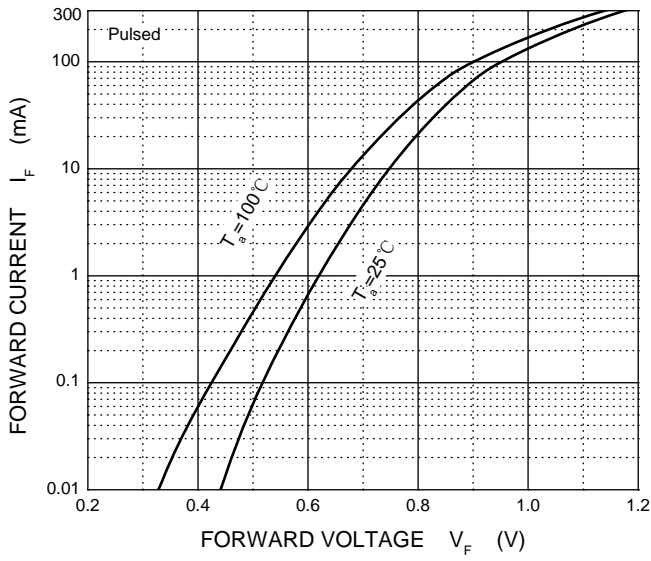
Symbol	Parameter	Value	Unit
V _{RRM}	Peak Repetitive Reverse Voltage	250	V
V _{RWM}	Working Peak Reverse Voltage		
V _{R(RMS)}	RMS Reverse Voltage	175	V
I _O	Average Rectified Output Current	225	mA
I _{FSM}	Non-repetitive Peak Forward Surge Current @ t=8.3ms	1.7	A
P _D	Power Dissipation	350	mW
R _{θJA}	Thermal Resistance from Junction to Ambient	357	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise specified)

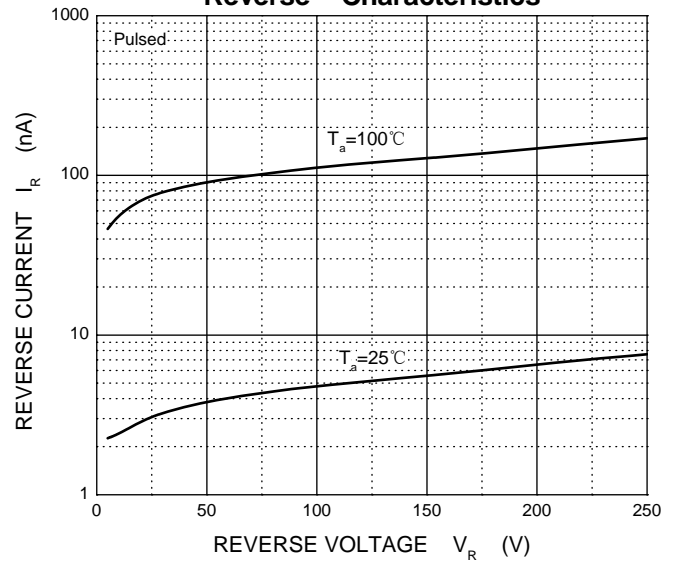
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V _(BR)	I _R =100μA	250			V
Reverse current	I _R	V _R =250V			0.1	μA
Forward voltage	V _F	I _F =100mA			1	V
		I _F =200mA			1.25	
Total capacitance	C _{tot}	V _R =0V, f=1MHz			5	pF
Reverse recovery time	t _{rr}	I _F = I _R =30mA, I _{rr} =0.1×I _R , R _L =100Ω			50	ns

Typical Characteristics

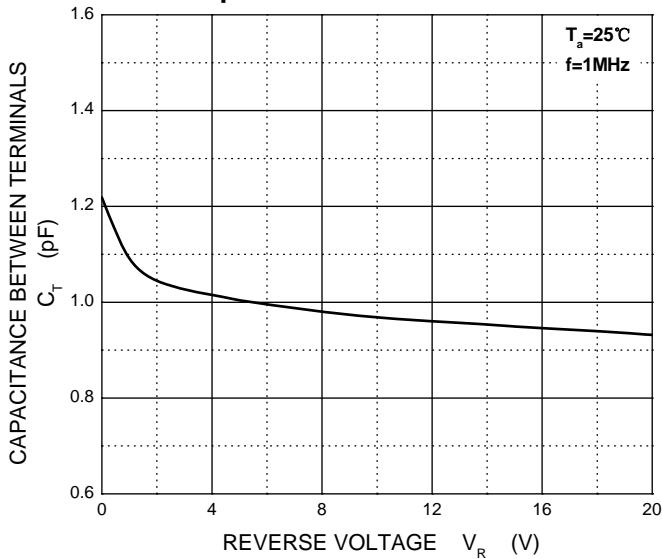
Forward Characteristics



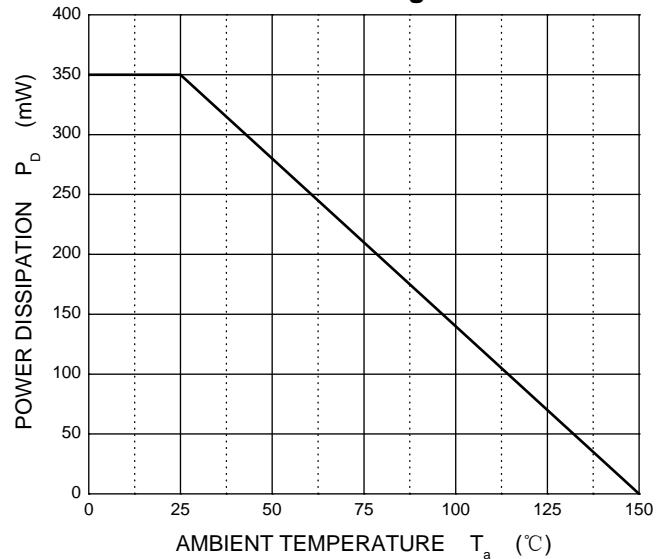
Reverse Characteristics



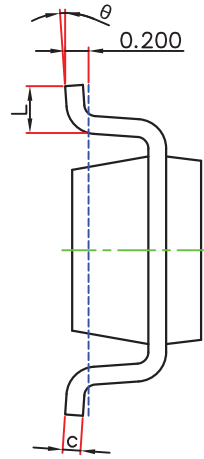
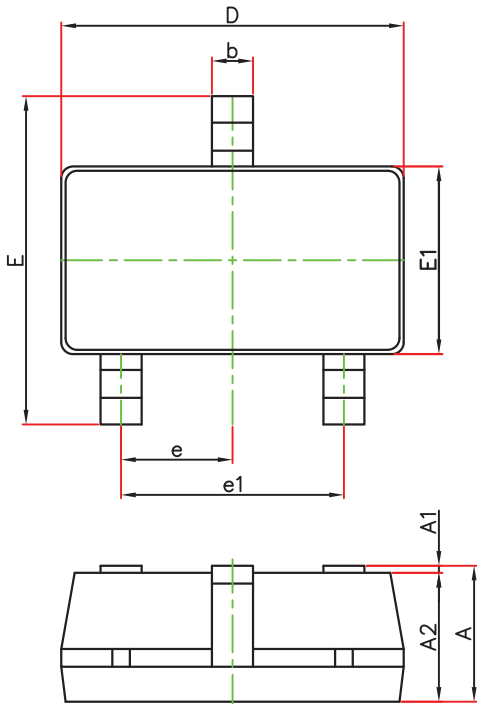
Capacitance Characteristics



Power Derating Curve



SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E1	1.500	1.700	0.059	0.067
E	2.650	2.950	0.104	0.116
e	0.950(BSC)		0.037(BSC)	
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.012	0.024
θ	0°	8°	0°	8°