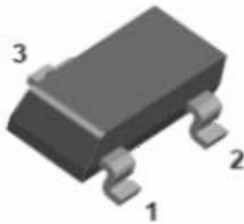
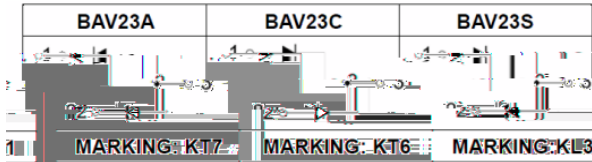


Dual Switching Diode



SOT-23

Features

- Moisture sensitivity level 1
- Reverse voltage 250V
- Average forward current 225mA

Application

- Signal switching
- High frequency rectifier

Mechanical data

- **Package** SOT-23
- **Terminals** Tin plated leads, solderable per J-STD-002 and JESD22-B102

Maximum Ratings ($T_a=25$ Unless otherwise specified)

Parameter	Symbol	Unit	Value	
			BAV23A	BAV23C
Device marking code			KT7	KT6
			KT6	KT6
			KL31	KL31
Repetitive peak reverse voltage	V_{RRM}	V	250	
Forward current, per leg	I_F	mA	225	
Repetitive peak forward current @ $T_a=25$ ms,duty:25%	I_{FRM}	mA	625	
Non-repetitive surge peak forward current @ $t=8.3$ ms half-sine wave	I_{FSM}	A	1.7	
Non-repetitive surge peak forward current @ $t=1$ us square wave			4	
Power dissipation	P_D	mW	350	
Junction temperature	T_J		-55 to +150	
Storage temperature	T_{STG}		-55 to +150	



Electrical Characteristics ($T_a=25$ Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Reverse voltage	V_R	V	$I_R=100\mu A$	250		
Forward voltage	V_{F1}	V	$I_F=100mA$			1
	V_{F2}	V	$I_F=200mA$			1.25
Reverse leakage current	I_R	μA	$V_R=200V$			0.1
Junction capacitance	C_j	pF	$V_R=0V, f=1MHz$			5
Reverse recovery time	T_{rr}	ns	$I_F=I_R=30mA$ $V_R=6V, I_{rr}=3mA, R_L=100$			50

Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	$R_{J-A}^{(1)}$	$^{\circ}C/W$	357
Thermal resistance, junction-to-case	$R_{J-C}^{(1)}$	$^{\circ}C/W$	286

Note:

- 1 Device mounted on PCB, single-sided copper with standard footprint



Characteristics

Fig 1 Pb-Ta Curve

Fig 2 Capacitance Capability

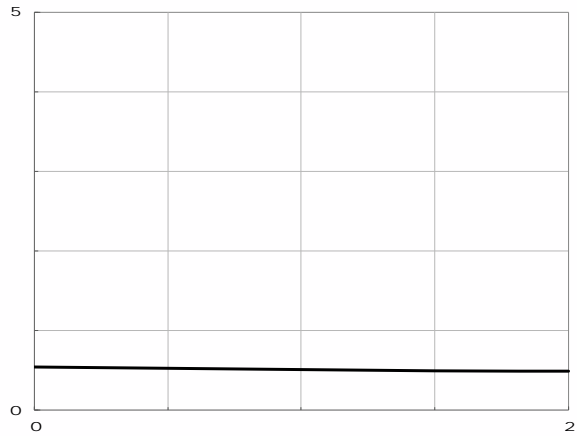


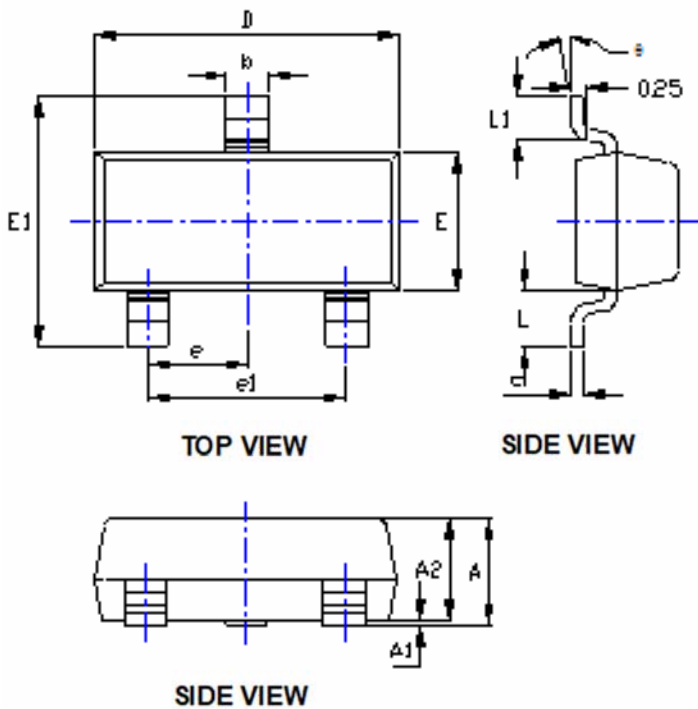
Fig 3 Typical Forward Characteristics

Fig 4 Typical Reverse Characteristics

Ordering Information

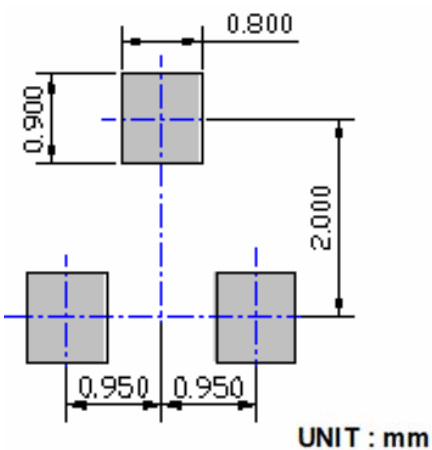
Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity (pcs)	Delivery mode
BAV23C	F2	Approximate 0.008	3000	30000	120000	7" reel
BAV23C	F4	Approximate 0.008	10000	/	210000	13" reel

Outline Dimensions



SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.045	0.900	1.150
A1	0.000	0.004	0.000	0.100
A2	0.035	0.041	0.900	1.050
b	0.012	0.020	0.300	0.500
c	0.004	0.008	0.100	0.200
D	0.110	0.118	2.800	3.000
E	0.047	0.055	1.200	1.400
E1	0.089	0.100	2.250	2.550
e	0.037TYP		0.950TYP	
e1	0.071	0.079	1.800	2.000
L	0.022REF		0.550REF	
L1	0.012	0.020	0.300	0.500
θ	0°	8°	0°	8°

Suggested Pad Layout





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