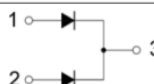
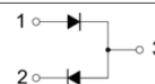
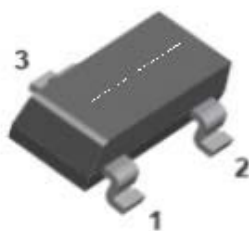


BAV23A/C/S

Dual Switching Diode

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



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°C Unless otherwise specified)

Parameter	Symbol	Unit	Value	
Device marking code			BAV23A	KT7
			BAV23C	KT6
			BAV23S	KL31
Repetitive peak reverse voltage	V _{RRM}	V	250	
Forward current, per leg	I _F	mA	225	
Repetitive peak forward current @T ≤ 1ms, duty: 25%	I _{FRM}	mA	625	
Non-repetitive surge peak forward current @ t=8.3ms half-sine wave	I _{FSM}	A	1.7	
Non-repetitive surge peak forward current @ t=1us square wave			4	
Power dissipation	P _D	mW	350	
Junction temperature	T _J	°C	-55 to +150	
Storage temperature	T _{STG}	°C	-55 to +150	

BAV23A/C/S

■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Reverse voltage	V _R	V	I _R =100uA	250		
Forward voltage	V _{F1}	V	I _F =100mA			1
	V _{F2}	V	I _F =200mA			1.25
Reverse leakage current	I _R	uA	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 =100Ω			50

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	R _{θJ-A} ⁽¹⁾	°C/W	357
Thermal resistance, junction-to-case	R _{θJ-C} ⁽¹⁾	°C/W	286

Note:

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

BAV23A/C/S

■ Characteristics

Fig 1: P_D - T_a Curve

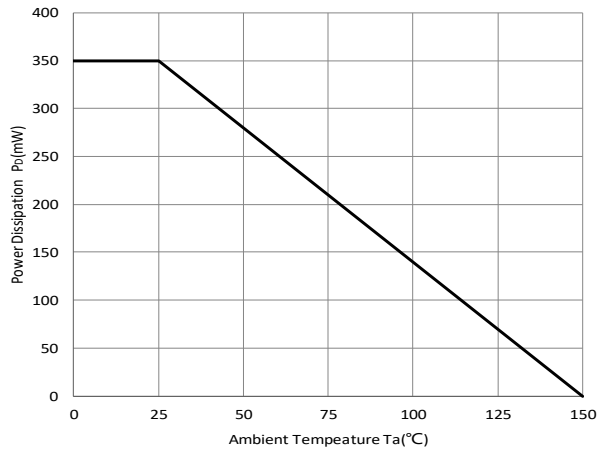


Fig 2: Capacitance Capability

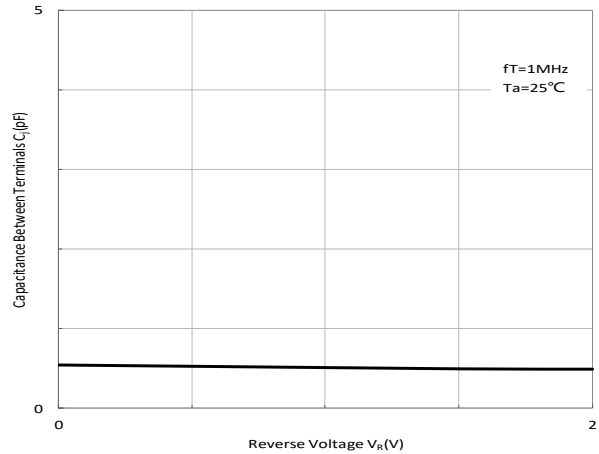


Fig 3: Typical Forward Characteristics

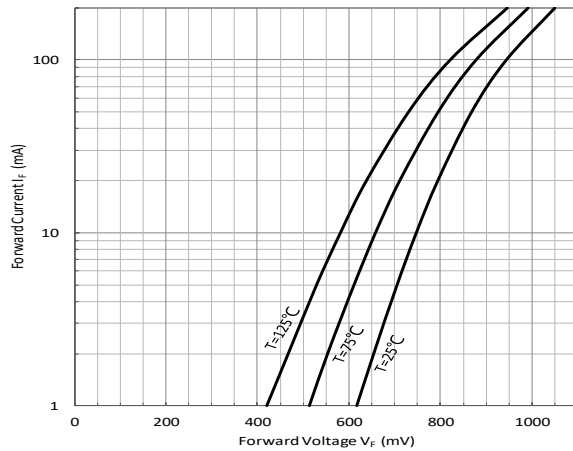
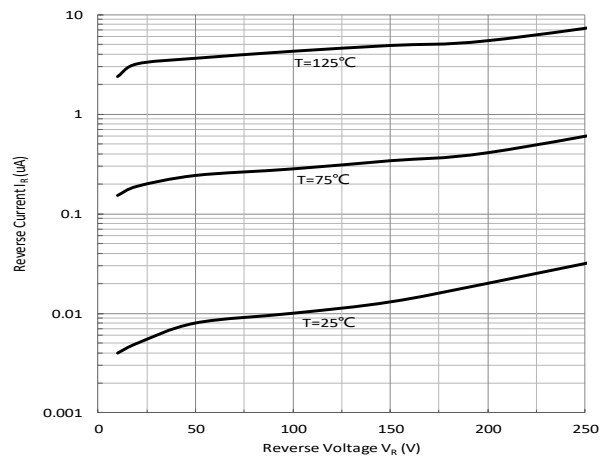


Fig 4: Typical Reverse Characteristics

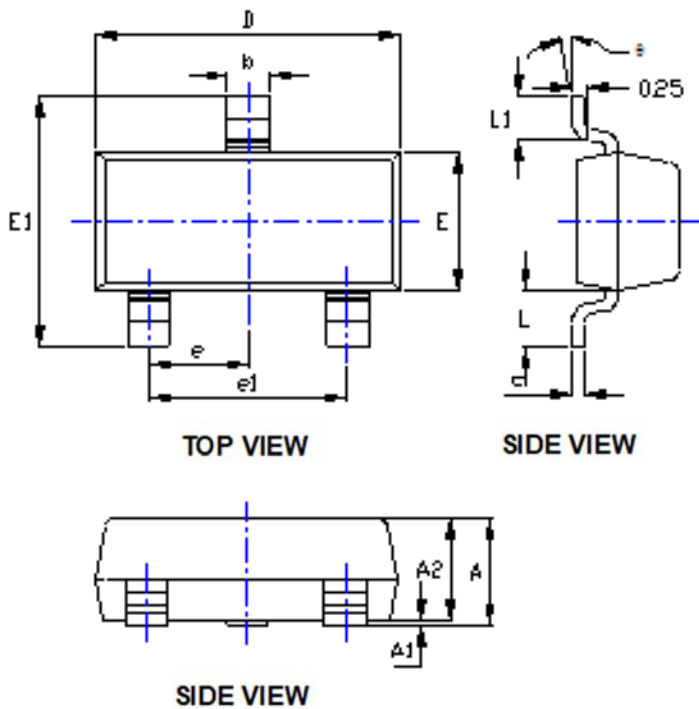


BAV23A/C/S

■ Ordering Information

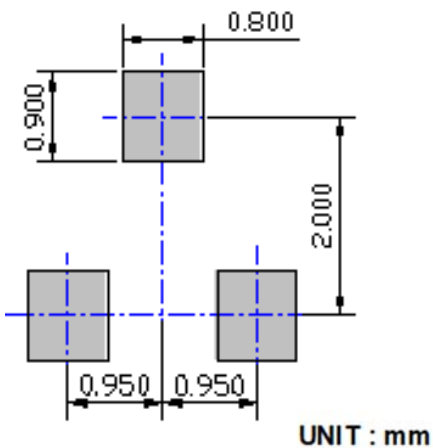
Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity (pcs)	Delivery mode
BAV23C	F2	Approximate 0.008	3000	30000	120000	7" reel
BAV23C	F4	Approximate 0.008	10000	/	210000	13" reel

■ 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



BAV23A/C/S

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