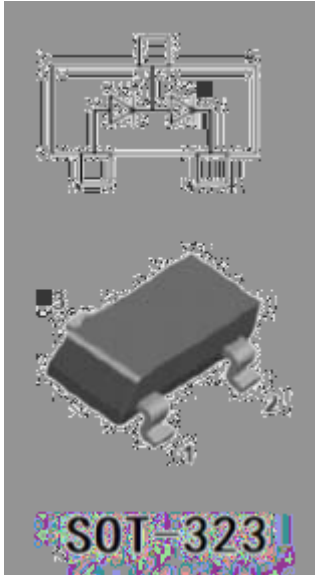




# Small-Signal Fast Switching Diodes



### Features

- Moisture sensitivity level 1
- Reverse voltage 100V
- Average forward current 160mA

### Application

- Signal switching

### Mechanical data

- **Package** SOT-323
- **Terminals** Tin plated leads, solderable per J-STD-002 and JESD22-B102

## Maximum Ratings (T<sub>a</sub>=25 Unless otherwise specified)

Parameter	Symbol	Unit	Value
Device marking code			K52
Repetitive peak reverse voltage	V <sub>RRM</sub>	V	85
Forward current, per leg	I <sub>F</sub>	mA	160
Non-repetitive surge peak forward current @ t=8.3ms half-sine wave	I <sub>FSM</sub>	A	2
Non-repetitive surge peak forward current @ t=1ms square wave			2
Power dissipation	P <sub>D</sub>	mW	200
Junction temperature	T <sub>J</sub>		-55 to +150
Storage temperature	T <sub>STG</sub>		-55 to +150



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Parameter	Symbol	Unit	Conditions	Min	Typ	Mc	m
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# Characteristics

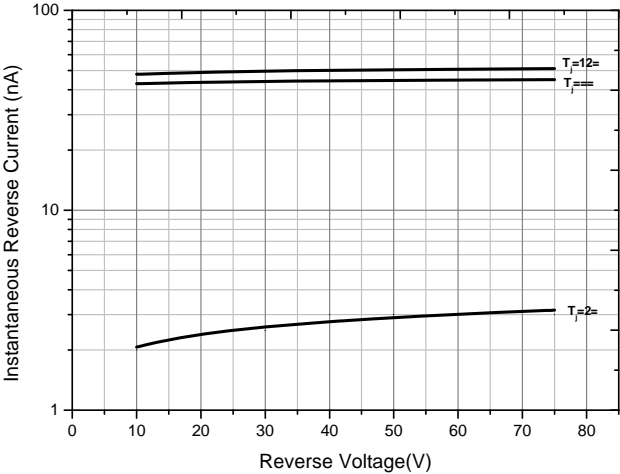
Fig 1 Pb-Ta Curve

Fig 2 Capacitance Capability

Fig 3 Typical Forward Characteristics



Fig 4 Typical Reverse Characteristics





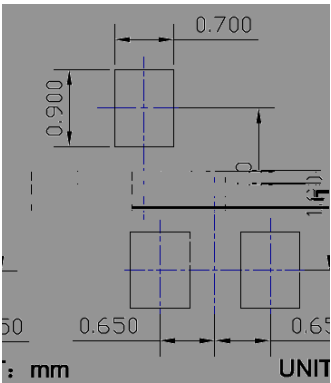
### Ordering Information

Prefered P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
BAV199WT	F2	Approximate 0.005	3000	30000	120000	7" reel

### Outline Dimensions

SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.043	0.900	1.100
A1	0.000	0.004	0.000	0.100
b	0.003	0.016	0.076	0.406
c	0.004	0.007	0.100	0.200
d	0.043	0.053	1.100	1.350
e	0.083	0.096	2.150	2.445
e1	0.047	0.055	1.200	1.400
L1	0.010	0.018	0.250	0.450
θ	0°	8°	0°	8°

### Suggested Pad Layout





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