

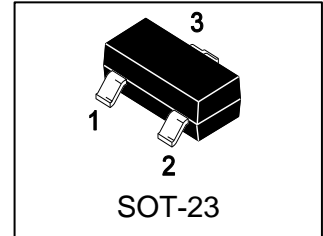
BAV199L

S-BAV199L

Surface Mount Low Leakage Diode

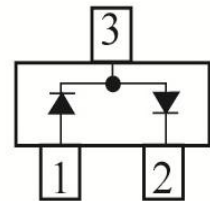
1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.
- Ultra-Small Surface Mount Package
- Low Leakage Current



2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
BAV199L	52	3000/Tape&Reel



3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage	VRRM	85	V
Working Peak Reverse Voltage	VRWM		
DC Blocking Voltage	VR		
RMS Reverse Voltage	VR(RMS)	60	V
Forward Continuous Current (Note 1)	IFM	215	mA
		Double Diode	
Repetitive Peak Forward Current	IFRM	500	mA
Non-Repetitive Peak Forward Current	IFSM	4	A
t=1μs		1	
t=1ms		0.5	
t=1s			
Power Dissipation (Note 1)	PD	150	mW
Thermal Resistance Junction to Ambient Air (Note 1)	RθJA	833	°C/W
Operating and Storage Temperature Range	TJ/Tstg	-65~+150	°C

1. Device mounted on FR-4 PC board with recommended pad layout



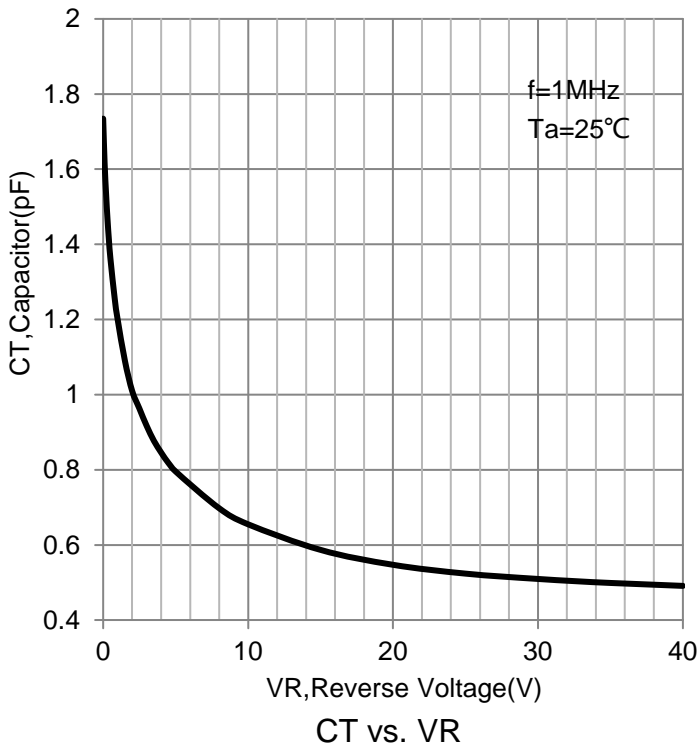
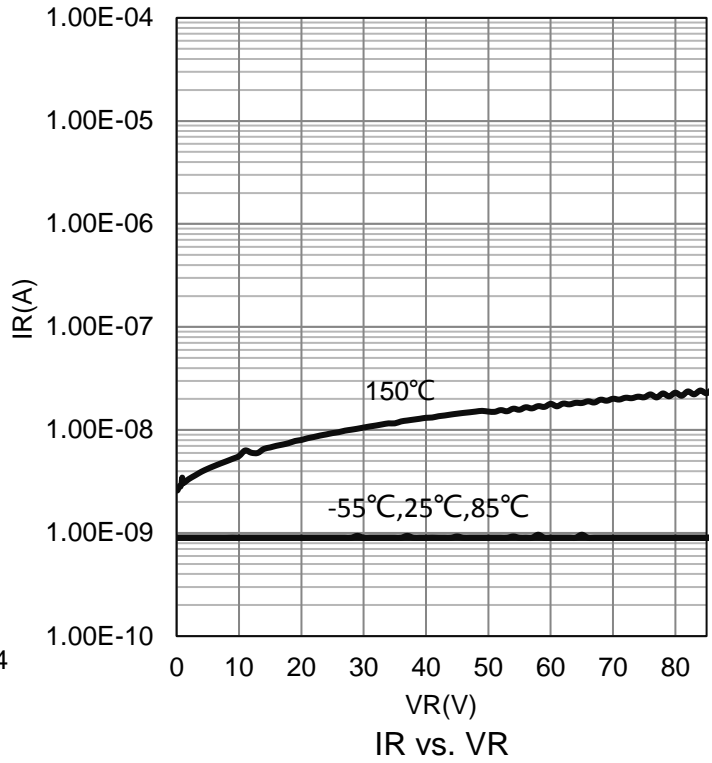
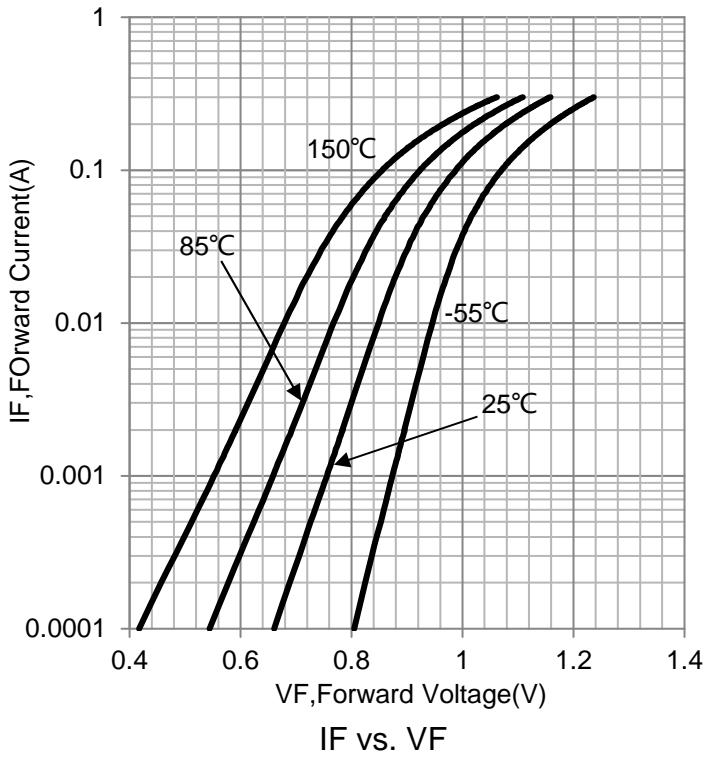
4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Static					
Reverse Breakdown Voltage (IR = 100μA)	V(BR)R	85	-	-	V
Forward Voltage (IF = 1mA)	VF	-	-	0.9	V
(IF = 10mA)		-	-	1	
(IF = 50mA)		-	-	1.1	
(IF = 150mA)		-	-	1.25	
Leakage Current (Note 2) (VR=75V)	IR	-	-	5	nA
(VR=75V, Tj=150°C)		-	-	80	
Total Capacitance (VR=0, f=1MHz)	CT	-	2	-	pF
Reverse Recovery Time (IF = IR = 10mA, Irr = 0.1 x IR , RL = 100Ω)	trr	-	-	3	μs

2.Short duration test pulse used to minimize self-heating effect.



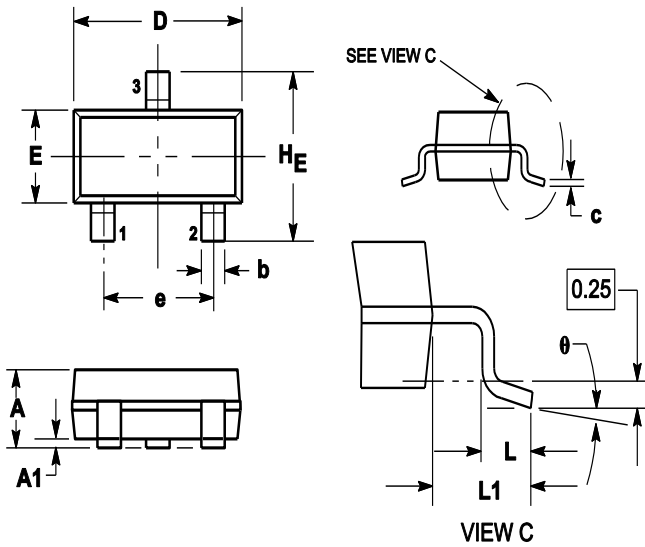
5.ELECTRICAL CHARACTERISTICS CURVES



6. OUTLINE AND DIMENSIONS

Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1	1.11	0.035	0.04	0.044
A1	0.01	0.06	0.1	0.001	0.002	0.004
b	0.37	0.44	0.5	0.015	0.018	0.02
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.9	3.04	0.11	0.114	0.12
E	1.20	1.3	1.4	0.047	0.051	0.055
e	1.78	1.9	2.04	0.07	0.075	0.081
L	0.10	0.2	0.3	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
HE	2.10	2.4	2.64	0.083	0.094	0.104
theta	0°	---	10°	0°	---	10°

7. SOLDERING FOOTPRINT

