

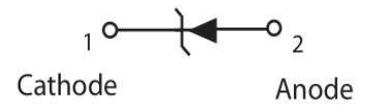
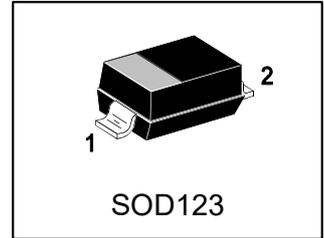
BAV3004

S-BAV3004

HIGH VOLTAGE SURFACE MOUNT SWITCHING 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.
- Fast Switching Speed
- High Conductance
- High Reverse Breakdown Voltage Rating



2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
BAV3004	34W	3000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Repetitive Peak Reverse Voltage	VRRM	350	V
RMS Reverse Voltage	VR (RMS)	240	V
Forward Continuous Current(Note 2)	IF	200	mA
Non-Repetitive Peak Forward Surge Current (t=1μs)	IFSM	4	A
(t=1s)		1	
Power Dissipation(Note 2)	PD	410	mW
Thermal Resistance Junction to Ambient Air(Note 2)	RθJA	500	°C/W
Operating and Storage Temperature Range	Tj, Tstg	-65~+150	°C



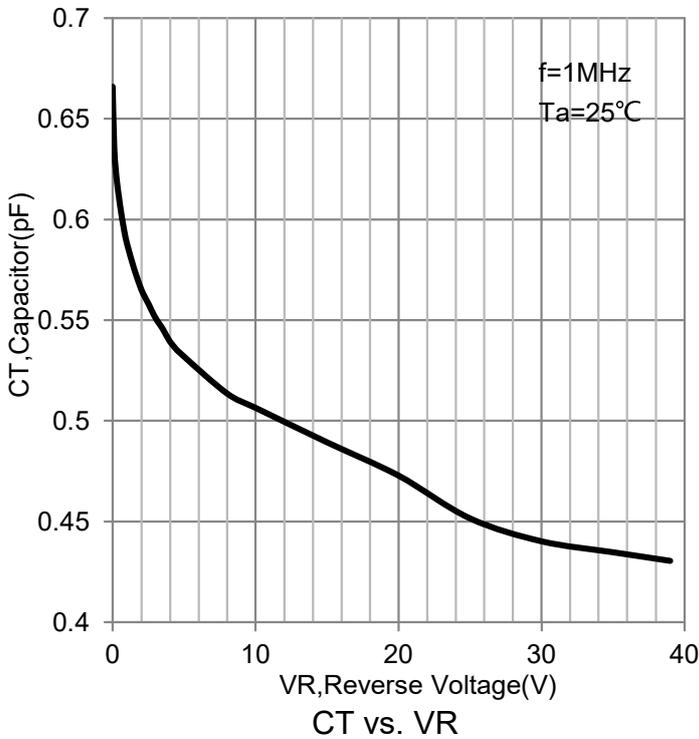
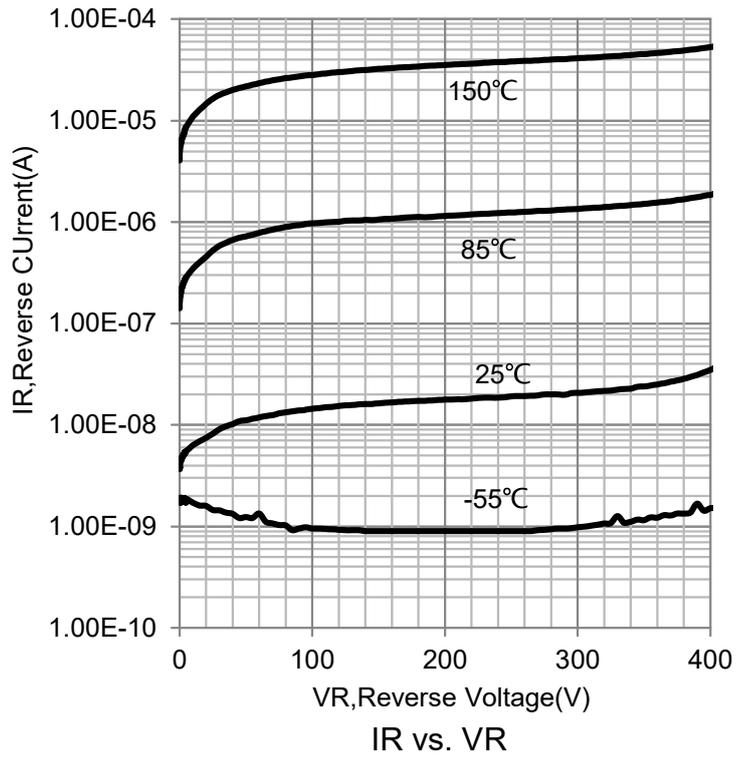
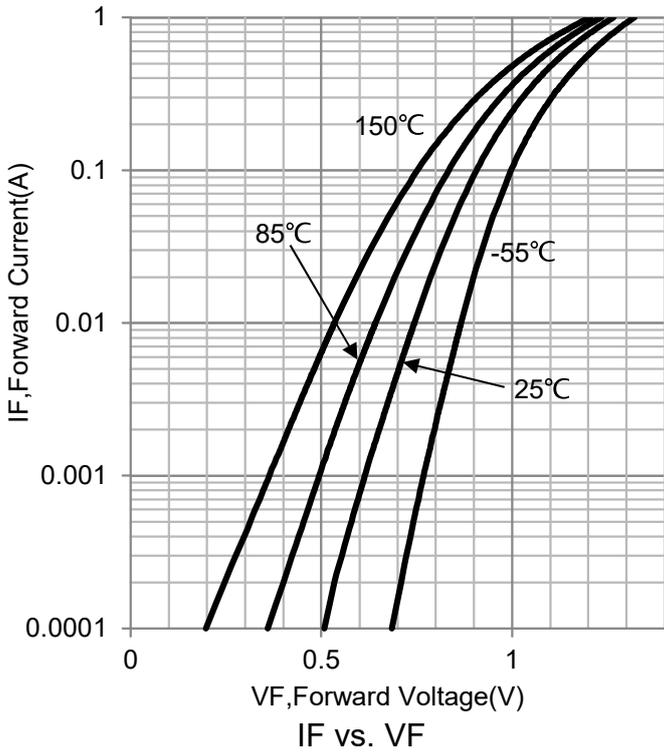
4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage(Note 1) (IR =150μA)	V(BR)R	350	-	-	V
Forward Voltage(Note 1) (IF =20mA) (IF =100mA) (IF =200mA)	VF	- - -	0.78 0.93 1.03	0.87 1 1.25	V
Reverse Current(Note 1) (VR=240V) (VR=240V, Tj =150°C)	IR	- -	30 35	100 100	nA μA
Total Capacitance (VR =0V, f=1.0MHz)	CT	-	1	5	pF
Reverse Recovery Time (IF =IR =30mA, Irr=3.0mA, RL =100Ω)	trr	-	-	50	ns

1. Short duration test pulse used to minimize self-heating effect.
2. Part mounted on FR-4 board with recommended pad layout.



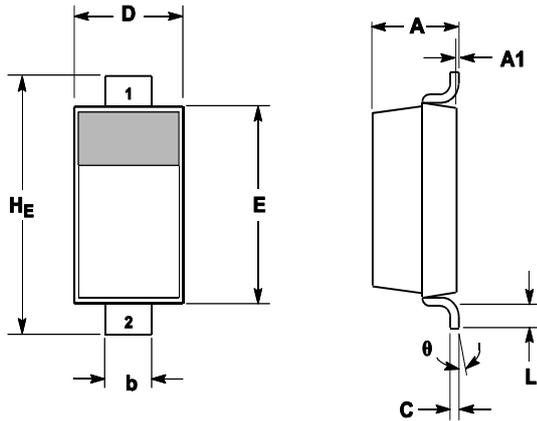
5.ELECTRICAL CHARACTERISTICS CURVES



6.OUTLINE AND DIMENSIONS

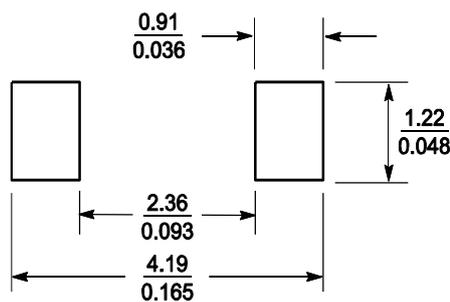
Notes:

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	0.94	1.17	1.35	0.037	0.046	0.053
A1	0.00	0.05	0.10	0.000	0.002	0.004
b	0.51	0.61	0.71	0.020	0.024	0.028
c	---	---	0.15	---	---	0.006
D	1.40	1.60	1.80	0.055	0.063	0.071
E	2.54	2.69	2.84	0.100	0.106	0.112
HE	3.56	3.68	3.86	0.140	0.145	0.152
L	0.25	---	---	0.010	---	---
θ	0°	---	10°	0°	---	10°

7.SOLDERING FOOTPRINT



SCALE 10:1 (mm/inches)

