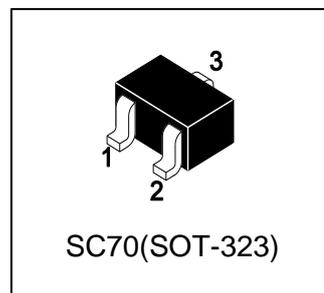


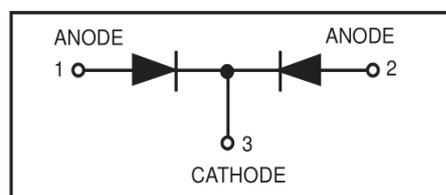
### 1. FEATURES

- 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.
- For high-speed switching applications.



### 2. DEVICE MARKING AND RESISTOR VALUES

Device	Marking	Shipping
BAV70WT1G	A4	3000/Tape&Reel
S-BAV70WT1G	A4	3000/Tape&Reel



### 3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Reverse Voltage	VR	70	V
Forward Current	IF	200	mA
Peak Forward Surge Current	IFM(surge)	500	mA

### 4. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	200 1.6	mW mW/°C
Thermal Resistance Junction-to-Ambient	ROJA	625	°C/W
Total Device Dissipation, Alumina Substrate (Note 2) @ TA = 25°C Derate above 25°C	PD	300 2.4	mW mW/°C
Thermal Resistance Junction-to-Ambient	ROJA	417	°C/W
Junction and Storage temperature	TJ,Tstg	-55 ~ +150	°C

1.FR-5 = 1.0 × 0.75 × 0.062 in.

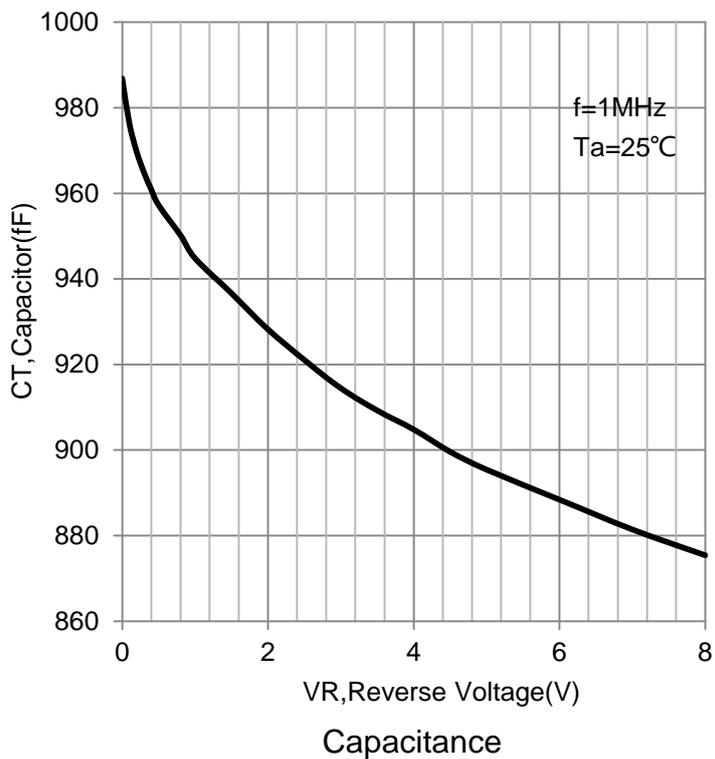
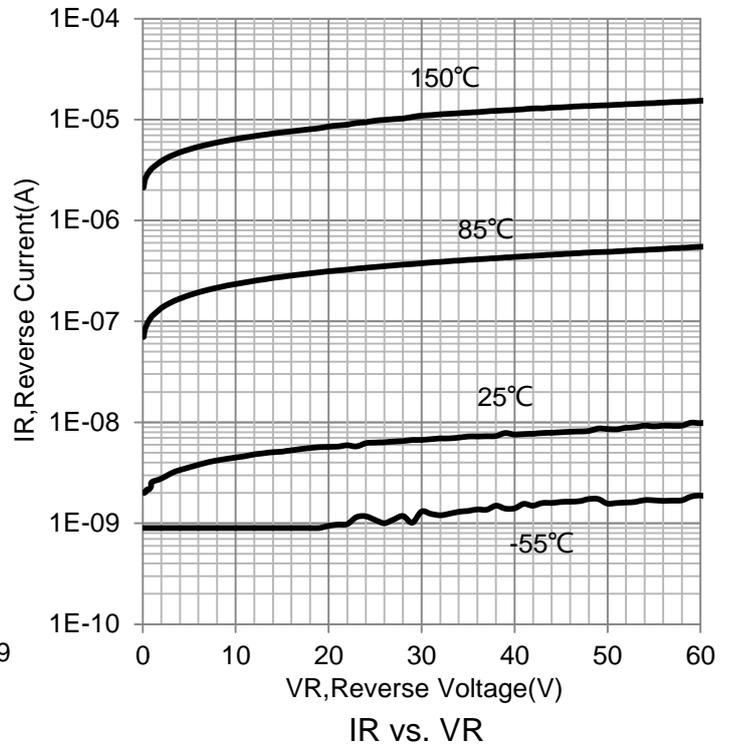
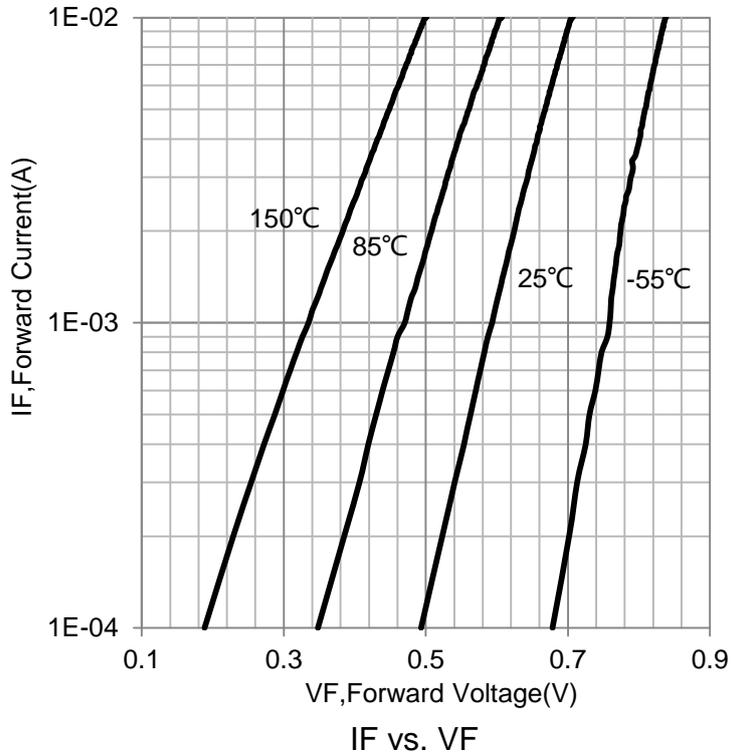
2.Alumina = 0.4 × 0.3 × 0.024 in. 99.5% alumina.

**5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)**

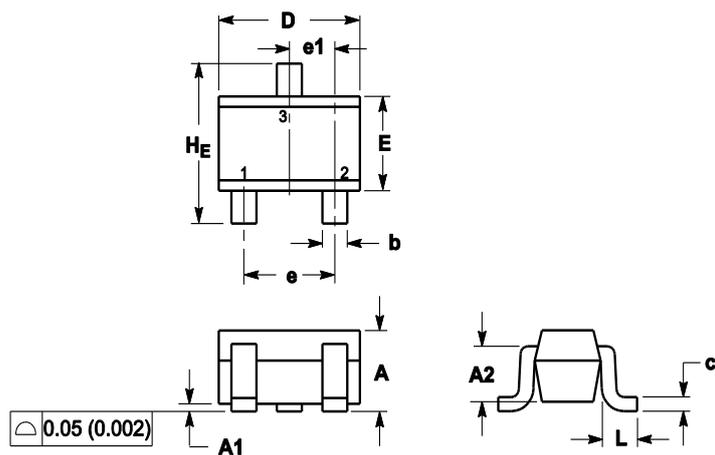
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (I(BR)=100μA)	VBR	70	-	-	V
Reverse Voltage Leakage Current (VR = 70V)	IR	-	-	5.0	μA
(VR = 50V)		-	-	100	nA
Diode Capacitance (VR = 0V, f = 1.0 MHz)	CD	-	-	1.5	pF
Forward Voltage (IF = 1.0 mA)	VF	-	-	715	mV
(IF = 10 mA)		-	-	855	
(IF = 50 mA)		-	-	1000	
(IF = 150 mA)		-	-	1250	
Reverse Recovery Time (IF=IR=10mA, RL=100Ohm, IR(REC)=1.0 mA)	trr	-	-	6.0	ns
Forward Recovery Voltage (IF = 10 mA, tr = 20 ns)	VRF	-	-	1.75	V

3.For each individual diode while the second diode is unbiased.

### 6. ELECTRICAL CHARACTERISTICS CURVES



### 7. 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	0.80	0.90	1.00	0.032	0.035	0.039
A1	0.00	0.05	0.10	0.000	0.002	0.004
A2	0.70REF			0.028REF		
b	0.30	0.35	0.40	0.012	0.014	0.016
c	0.10	0.18	0.25	0.004	0.007	0.010
D	1.80	2.10	2.20	0.071	0.083	0.087
E	1.15	1.24	1.35	0.045	0.049	0.053
e	1.20	1.30	1.40	0.047	0.051	0.055
e1	0.65REF			0.026REF		
L	0.20	0.38	0.56	0.008	0.015	0.022
HE	2.00	2.10	2.40	0.079	0.083	0.095

### 8. SOLDERING FOOTPRINT

