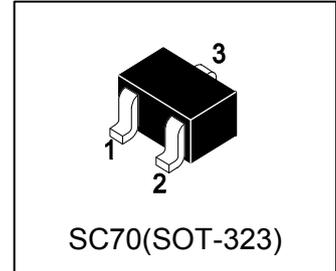


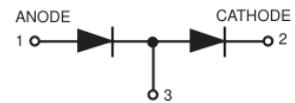
1. FEATURES

- 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.



2. APPLICATIONS

- ESD Protection
- Polarity Reversal Protection
- Data Line Protection
- Inductive Load Protection
- Steering Logic



3. DEVICE MARKING AND RESISTOR VALUES

Device	Marking	Shipping
BAV99WT1G	A7	3000/Tape&Reel
S-BAV99WT1G	A7	3000/Tape&Reel

4. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Reverse Voltage	VR	75	V
Forward Current	IF	215	mA
Peak Forward Surge Current	IFM(surge)	500	mA
Repetitive Peak Reverse Voltage	VRRM	70	V
Repetitive Peak Forward Current	IFRM	450	mA
Non-Repetitive Peak Forward Current	IFSM		A
t=1μs		2	
t=1ms		1	
t=1s		0.5	

1. FR-5 = 1.0×0.75×0.062 in.

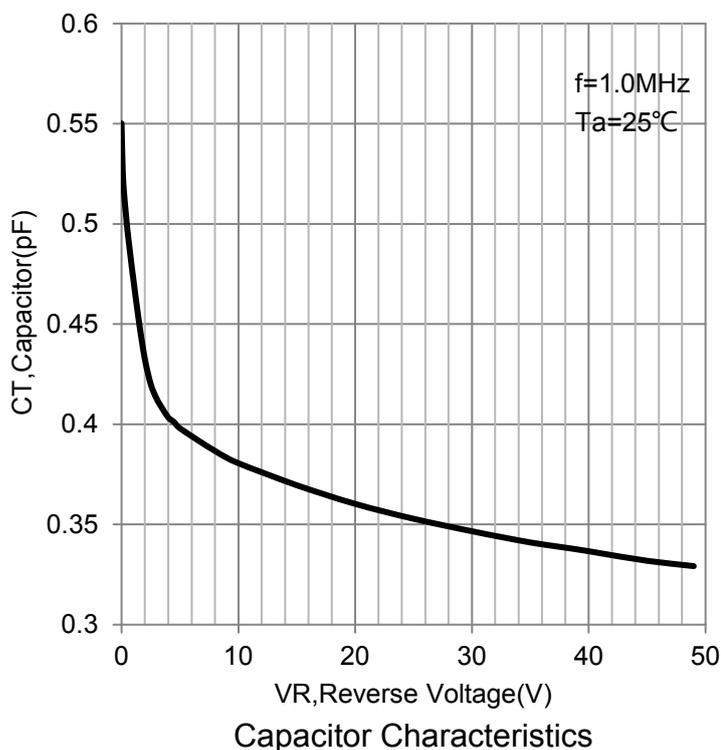
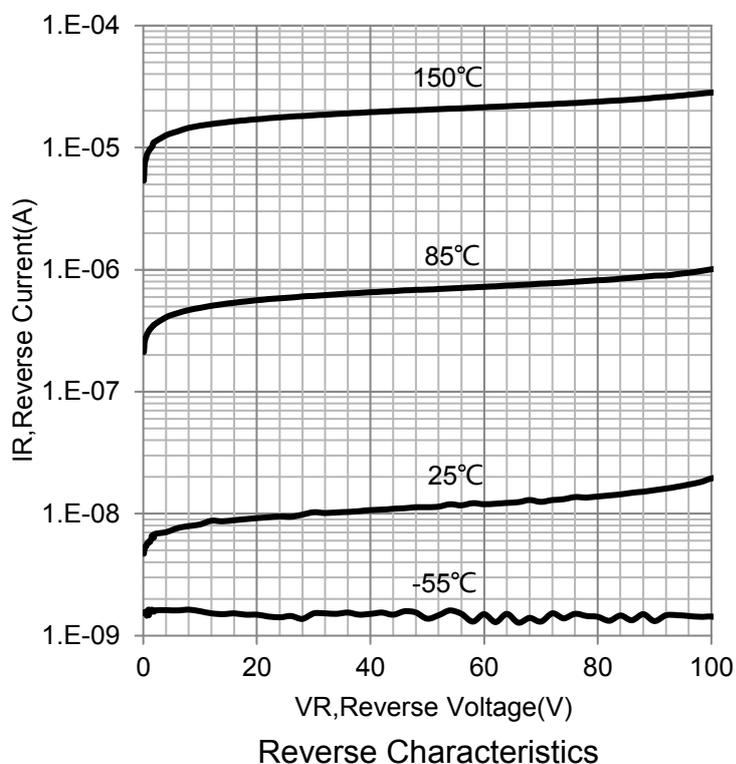
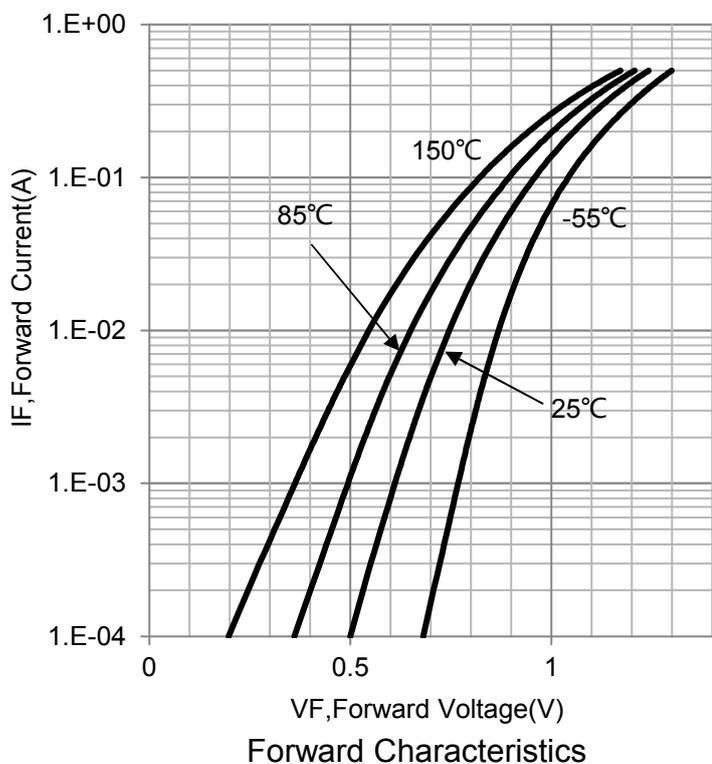
5. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-4 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	200 1.6	mW mW/°C
Thermal Resistance Junction-to-Ambient(Note 1)	RθJA	625	°C/W
Junction and Storage temperature	TJ,Tstg	-65~+150	°C

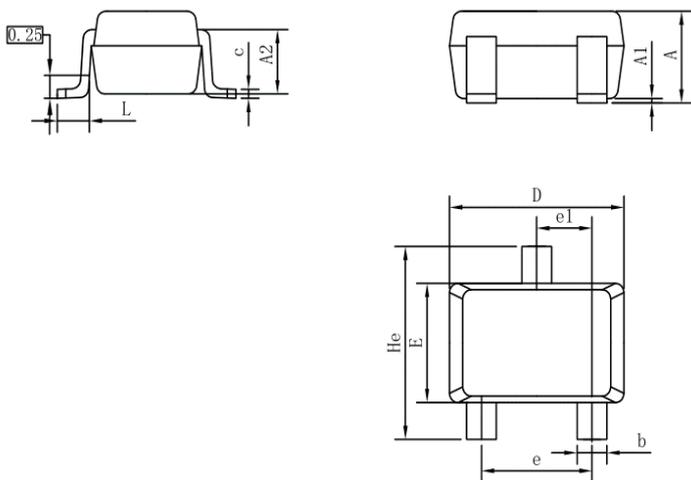
6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (I(BR)=100μA)	VBR	75	-	-	V
Reverse Voltage Leakage Current (VR = 70V) (VR = 70V, TJ = 150°C) (VR = 25V, TJ = 150°C)	IR	-	-	2.5 50 30	μA
Diode Capacitance (VR = 0V, f = 1.0 MHz)	CD	-	-	1.5	pF
Forward Voltage (IF = 1.0 mA) (IF = 10 mA) (IF = 50 mA) (IF = 150 mA)	VF	-	-	715 855 1000 1250	mV
Reverse Recovery Time, RL =50Ω (IF =IR =10 mA, iR(REC) =1.0mA)	trr	-	-	6.0	ns
Forward Recovery Voltage (IF = 10 mA, tr = 20 ns)	VFR	-	-	1.75	V

7. ELECTRICAL CHARACTERISTICS CURVES

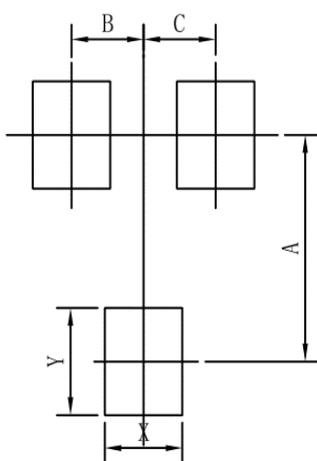


8. OUTLINE AND DIMENSIONS



SC70			
DIM	MIN	NOR	MAX
A	0.80	0.95	1.00
A1	0.00	0.05	0.10
A2	0.7 REF		
b	0.30	0.35	0.40
c	0.10	0.15	0.25
D	1.80	2.05	2.20
E	1.15	1.30	1.35
e	1.20	1.30	1.40
e1	0.65 BSC		
L	0.20	0.35	0.56
He	2.00	2.10	2.40
ALL Dimension in mm			

9. SOLDERING FOOTPRINT



SC70	
DIM	MIN
A	1.90
B	0.65
C	0.65
X	0.70
Y	0.90