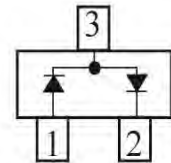
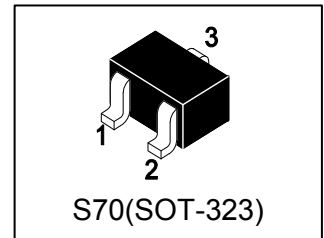


### 1. FEATURES

- 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.
- Extremely Fast Switching Speed
- Low Forward Voltage — 0.35 Volts (Typ) @  $I_F = 10 \text{ mA}$



### 2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
BAT54SWT1G	B8	3000/Tape&Reel
BAT54SWT3G	B8	10000/Tape&Reel

### 3. MAXIMUM RATINGS( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Limits	Unit
Reverse Voltage	VR	30	V
Forward Current	IF	200	mA

### 4. THERMAL CHARACTERISTICS

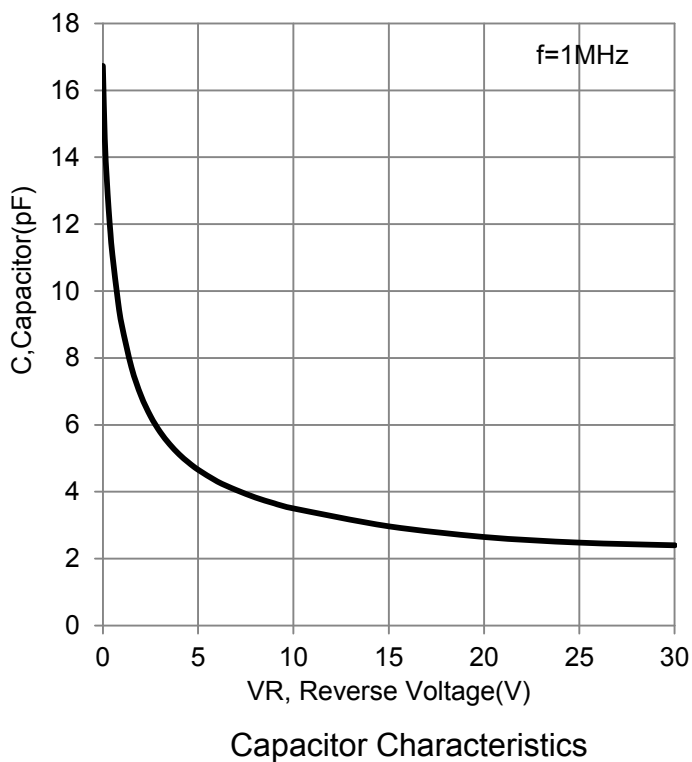
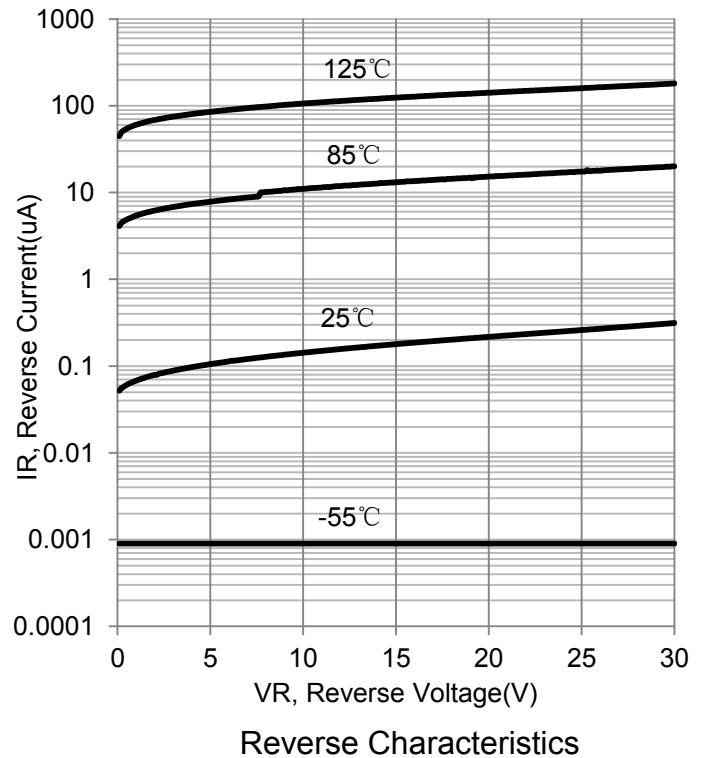
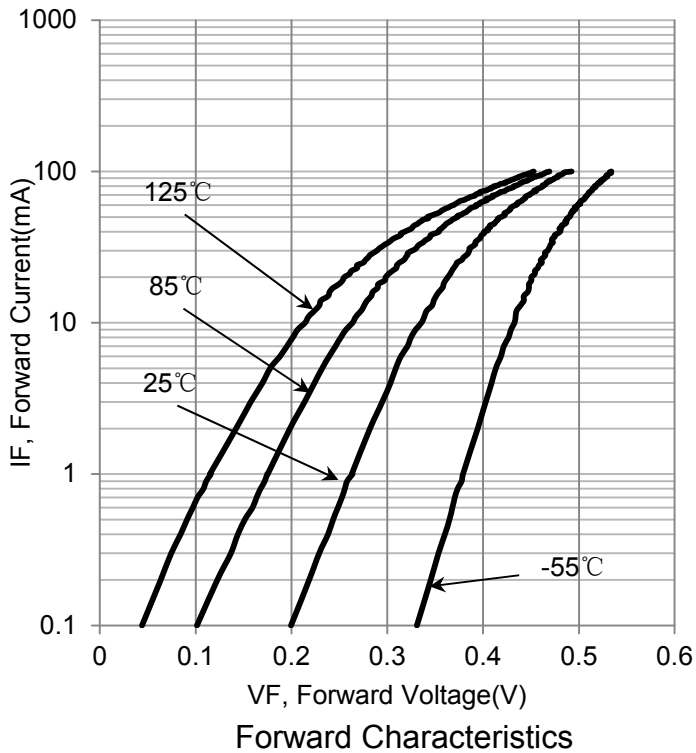
Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ $T_A = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$	PD	200 2	mW mW/ $^\circ\text{C}$
Thermal Resistance, Junction-to-Ambient(Note 1)	ROJA	500	$^\circ\text{C}/\text{W}$
Junction and Storage temperature	$T_J, T_{stg}$	-55~+125	$^\circ\text{C}$

1. FR-5 = 1.0×0.75×0.062 in.

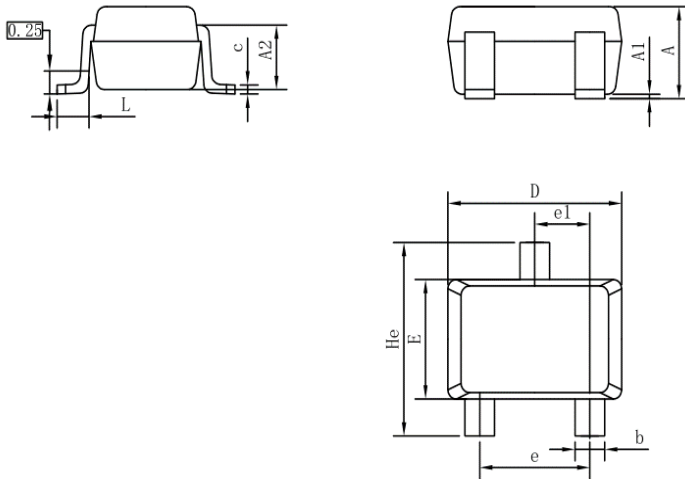
### 5. ELECTRICAL CHARACTERISTICS (Ta= 25°C )

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (IR = 10μA)	VBR	30	-	-	V
Reverse Voltage Leakage Current (VR = 25V)	IR	-	0.5	2	μA
Diode Capacitance (VR =1.0V , f = 1.0 MHz)	CT	-	-	10	pF
Forward Voltage (IF = 0.1 mA)	VF	-	0.22	0.24	V
(IF = 1 mA)		-	0.29	0.32	
(IF = 10 mA)		-	0.35	0.4	
(IF = 30 mA)		-	0.41	0.5	
(IF = 100 mA)		-	0.52	1	
Reverse Recovery Time (IF = IR = 10 mA, IR(REC) = 1.0 mA)	trr	-	-	5	ns
Repetitive Peak Forward Current	IFRM	-	-	300	mA
Non-Repetitive Peak Forward Current (t < 1.0 s)	IFSM	-	-	600	mA

**6. ELECTRICAL CHARACTERISTICS CURVES**

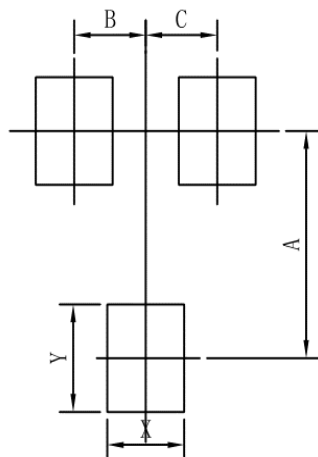


**7.OUTLINE AND DIMENSIONS**



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			

**8.SOLDERING FOOTPRINT**



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