

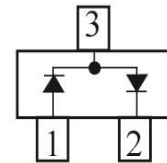
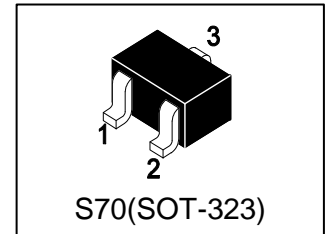
# LBAT54SWT1G

## S-LBAT54SWT1G

### Dual Series Schottky Barrier 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.
- Extremely Fast Switching Speed
- Low Forward Voltage — 0.35 Volts (Typ) @  $I_F = 10 \text{ mAdc}$



#### 2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBAT54SWT1G	B8	3000/Tape&Reel
LBAT54SWT3G	B8	10000/Tape&Reel

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

Parameter	Symbol	Limits	Unit
Reverse Voltage	VR	30	Vdc
Forward Current	IF	200	mAdc

#### 4. THERMAL CHARACTERISTICS

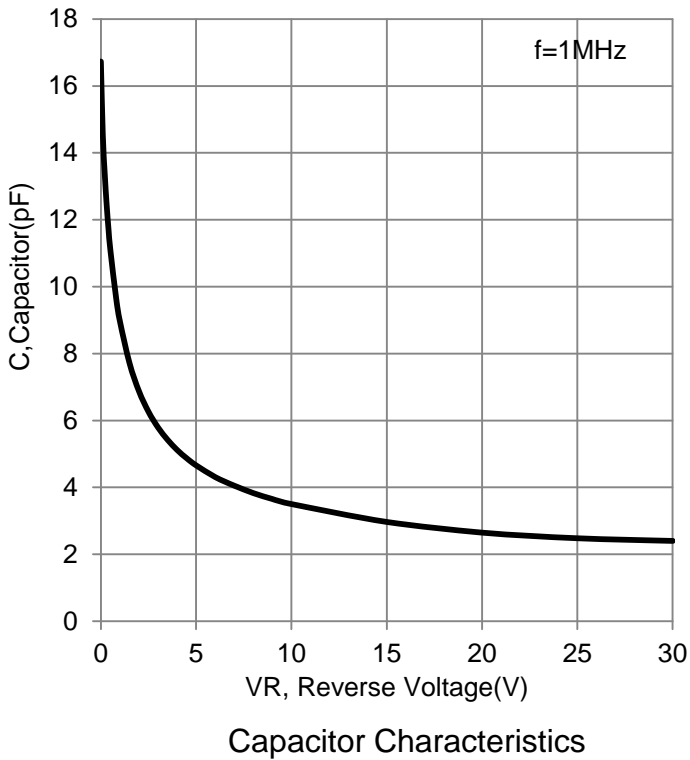
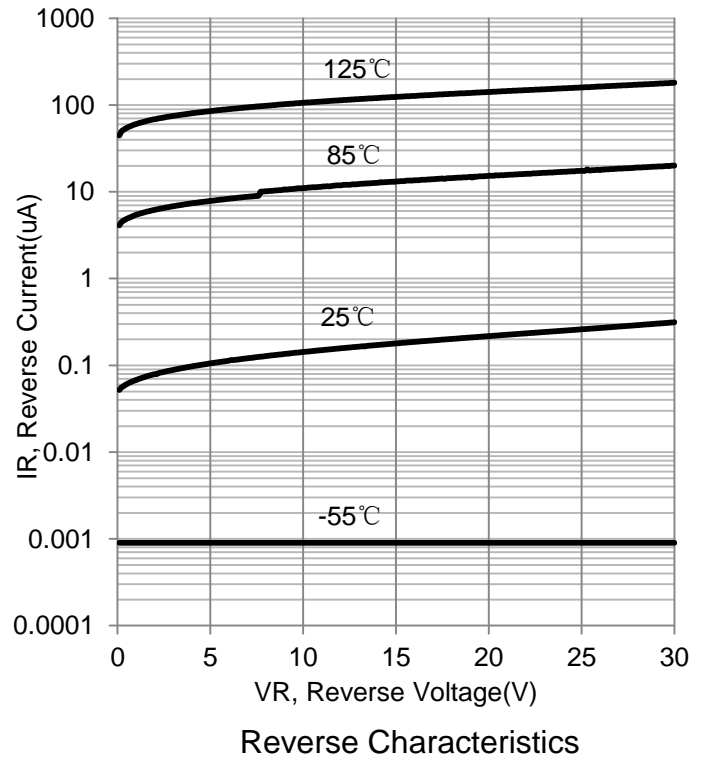
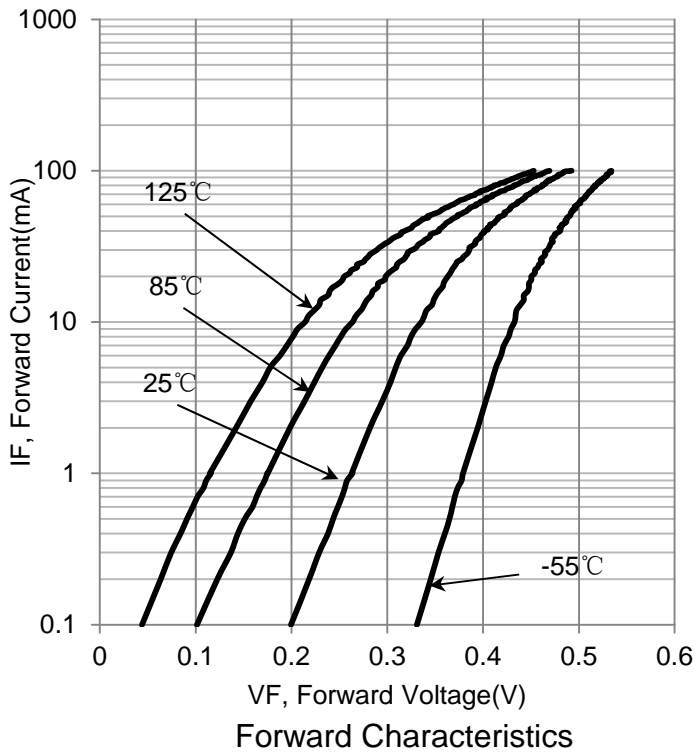
Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ $T_A = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$	PD	200 1.57	mW mW/ $^\circ\text{C}$
Thermal Resistance, Junction-to-Ambient(Note 1)	R $\theta$ JA	635	$^\circ\text{C}/\text{W}$
Junction and Storage temperature	TJ, Tstg	-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 = 10 $\mu$ Adc)	VBR	30	-	-	V
Reverse Voltage Leakage Current (VR = 25Vdc)	IR	-	0.5	2	$\mu$ A
Diode Capacitance (VR =1.0V , f = 1.0 MHz)	CT	-	-	10	pF
Forward Voltage (IF = 0.1 mAdc)	VF	-	0.22	0.24	V
(IF = 1 mAdc)		-	0.29	0.32	
(IF = 10 mAdc)		-	0.35	0.4	
(IF = 30 mAdc)		-	0.41	0.5	
(IF = 100 mAdc)		-	0.52	1	
Reverse Recovery Time (IF = IR = 10 mAdc, IR(REC) = 1.0 mAdc)	trr	-	-	5	ns
Repetitive Peak Forward Current	IFRM	-	-	300	mA
Non-Repetitive Peak Forward Current (t < 1.0 s)	IFSM	-	-	600	mA

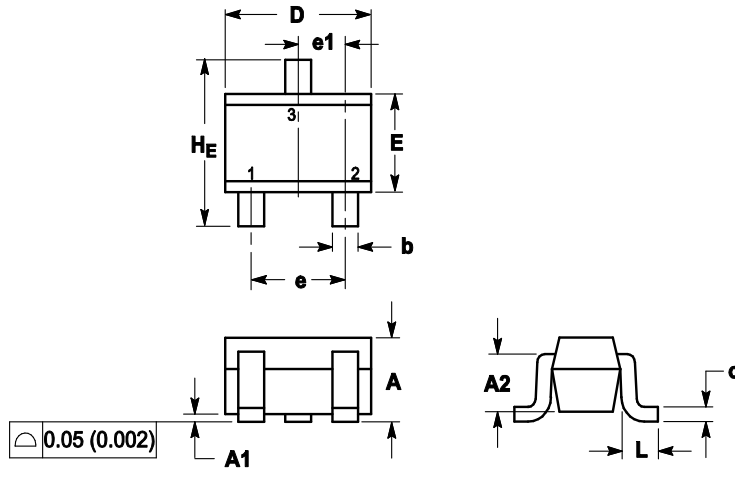
**6. ELECTRICAL CHARACTERISTICS CURVES**



**7. OUTLINE AND DIMENSIONS**

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**
