

DUAL SERIES SCHOTTKY BARRIER DIODE

These Schottky barrier diodes are designed for high speed applications, circuit protection, and voltage clamping. Extremely low forward voltage reduces conduction loss. Miniature surface package is excellent for hand held and portable applications space is limited.

● FEATURES

- 1)Extremely Fast Switching Speed
- 2) Low Forward Voltage — 0.35 Volts (Typ) @ $I_F = 10 \text{ mAdc}$
- 3)We declare that the material of product compliant with RoHS requirements and Halogen Free.
- 4)S- Prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.

● DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBAT54CWT1G	5C	3000/Tape&Reel
LBAT54CWT3G	5C	10000/Tape&Reel

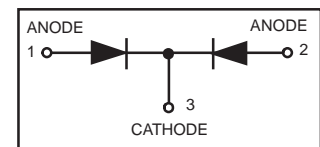
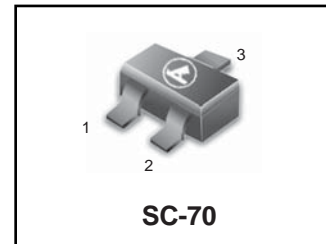
● MAXIMUM RATINGS($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
DC reverse voltage	V_R	30	V
Total Device Dissipation FR-5 Board, $T_A = 25^\circ\text{C}$	P_D	225	mW
Derate above 25°C		1.8	mW/ $^\circ\text{C}$
DC forward current	I_F	200	mA
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$

● ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	30	—	—	V	$I_R = 10 \mu\text{A}$
Forward voltage	V_F	—	0.22	0.24	V	$I_F = 0.1 \text{ mA}$
Forward voltage	V_F	—	0.29	0.32	V	$I_F = 1 \text{ mA}$
Forward voltage	V_F	—	0.35	0.4	V	$I_F = 10 \text{ mA}$
Forward voltage	V_F	—	0.41	0.5	V	$I_F = 30 \text{ mA}$
Forward voltage	V_F	—	0.52	1	V	$I_F = 100 \text{ mA}$
Reverse current	I_R	—	0.5	2	μA	$V_R = 25 \text{ V}$
Repetitive Peak Forward Current	I_{FRM}	—	—	300	mA	
Non-Repetitive Peak Forward Current ($t < 1.0 \text{ s}$)	I_{FSM}	—	—	600	mA	
Total Capacitance	C_T	—	—	10	pF	$V_R = 1.0 \text{ V}, f = 1.0 \text{ MHz}$
Reverse Recovery Time	t_{rr}	—	—	5	ns	$I_F = I_R = 10 \text{ mAdc}, I_{R(REC)} = 1.0 \text{ mAdc}$

LBAT54CWT1G S-LBAT54CWT1G



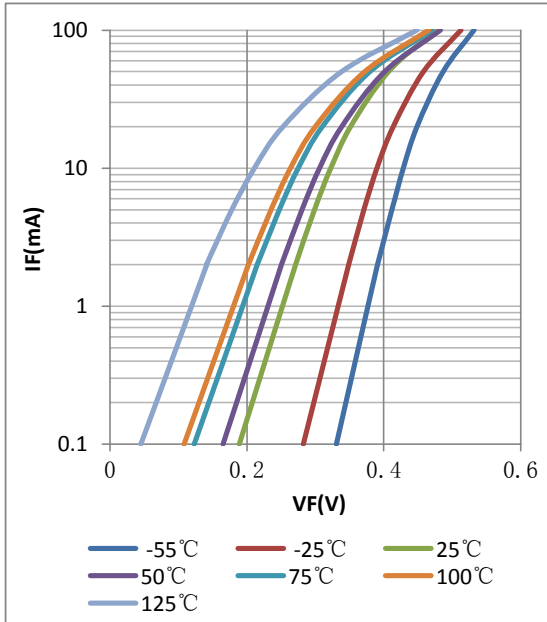
LBAT54CWT1G,S-LBAT54CWT1G
ELECTRICAL CHARACTERISTIC CURVES


FIG. 1 Forward Characteristics

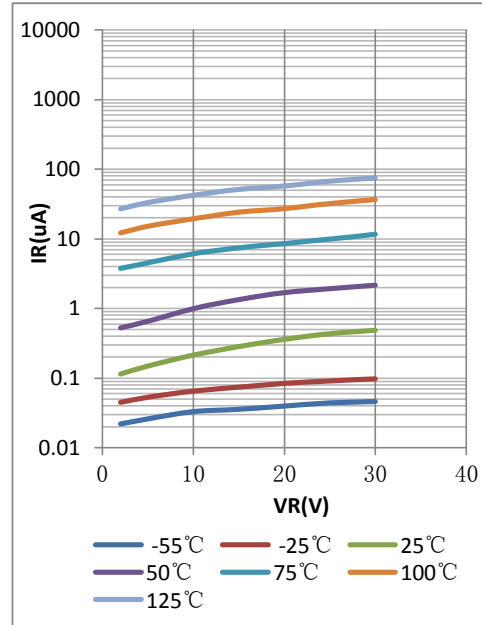


FIG. 2 Reverse Characteristics

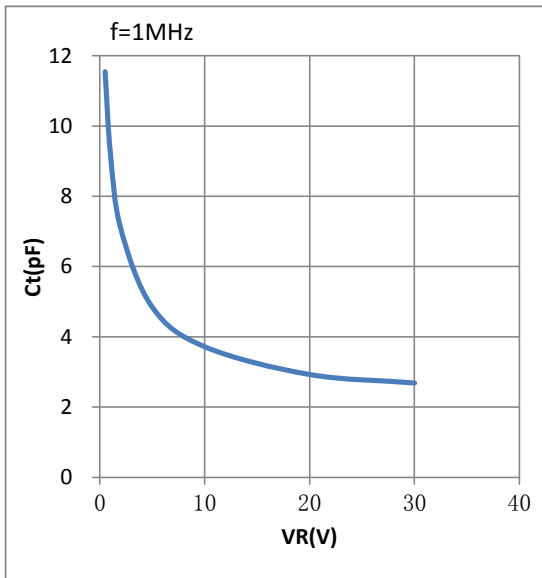
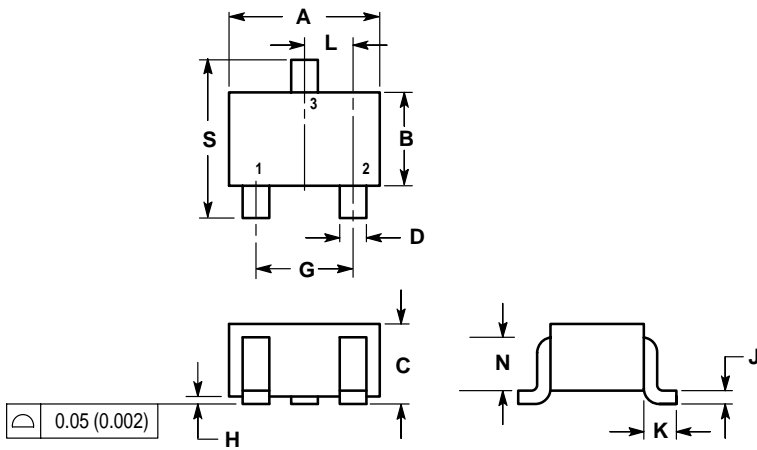


FIG. 3 Capacitance

LBAT54CWT1G,S-LBAT54CWT1G
SC-70
NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.071	0.087	1.80	2.20
B	0.045	0.053	1.15	1.35
C	0.032	0.040	0.80	1.00
D	0.012	0.016	0.30	0.40
G	0.047	0.055	1.20	1.40
H	0.000	0.004	0.00	0.10
J	0.004	0.010	0.10	0.25
K	0.017 REF		0.425 REF	
L	0.026 BSC		0.650 BSC	
N	0.028 REF		0.700 REF	
S	0.079	0.095	2.00	2.40

