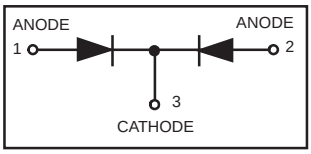
DUAL SERIES SCHOTTKY BARRIER DIODE

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.

LBAT54CWT1G
S-LBAT54CWT1G

SC-70



●FEATURES

1)Extremely Fast Switching Speed
2) Low Forward Voltage — 0.35 Volts (Typ) @ I_F = 10 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(Ta = 25℃)

Parameter	Symbol	Limits	Unit
DC reverse voltage	V_R	30	V
Total Device Dissipation FR-5 Board,T_A = 25°C Derate above 25°C	P_D	 225 1.8	 mW mW/°C
DC forward current	I_F	200	mA
Junction temperature	Tj	125	℃
Storage temperature	Tstg	−55～+150	℃

●ELECTRICAL CHARACTERISTICS (Ta= 25℃)

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

LBAT54CWT1G,S-LBAT54CWT1G

ELECTRICAL CHARACTERISTIC CURVES

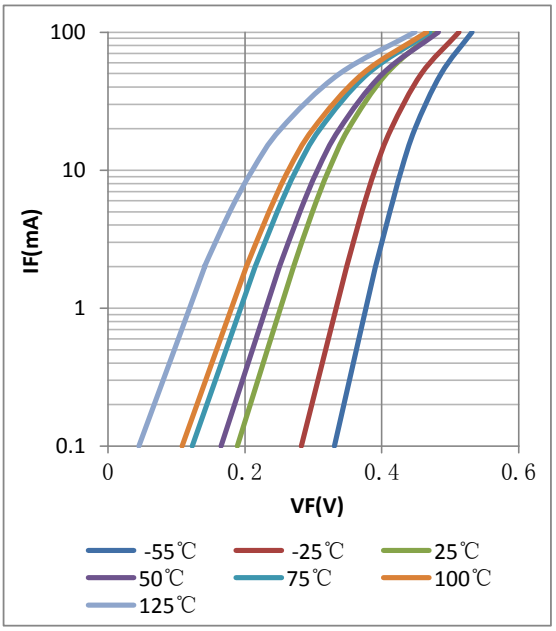


FIG. 1 Forward Characteristics

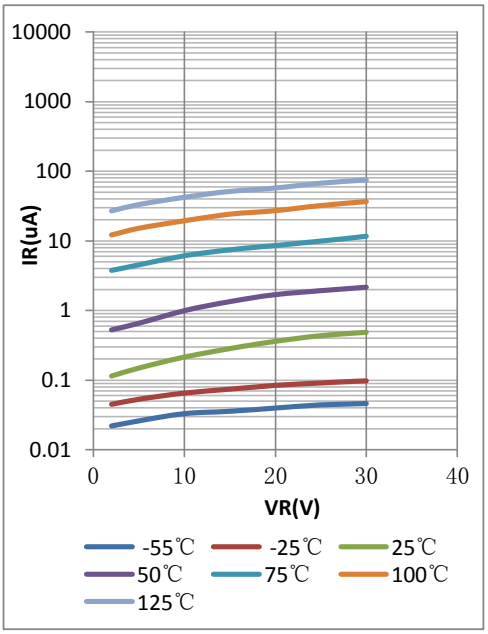


FIG. 2 Reverse Characteristics

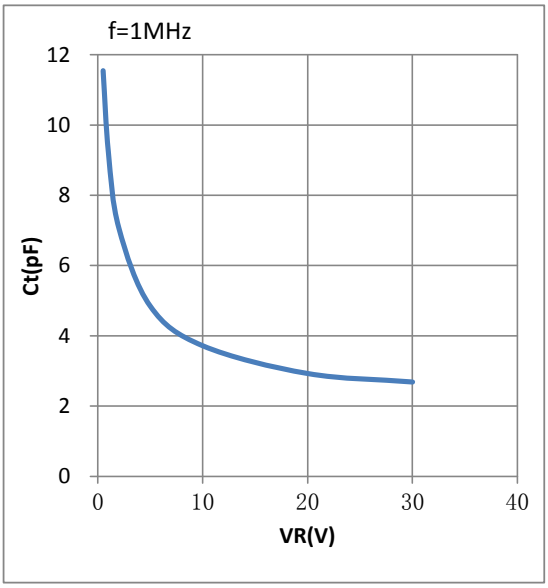


FIG. 3 Capacitance

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