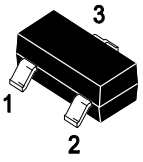
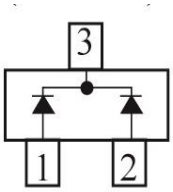
LBAT54CLT1G
S-LBAT54CLT1G

Dual Series Schottky Barrier Diode



SOT23(TO-236)



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) @ IF = 10 mAdc

2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBAT54CLT1G	5C	3000/Tape&Reel
LBAT54CLT3G	5C	10000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25ºC)

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

4. THERMAL CHARACTERISTICS

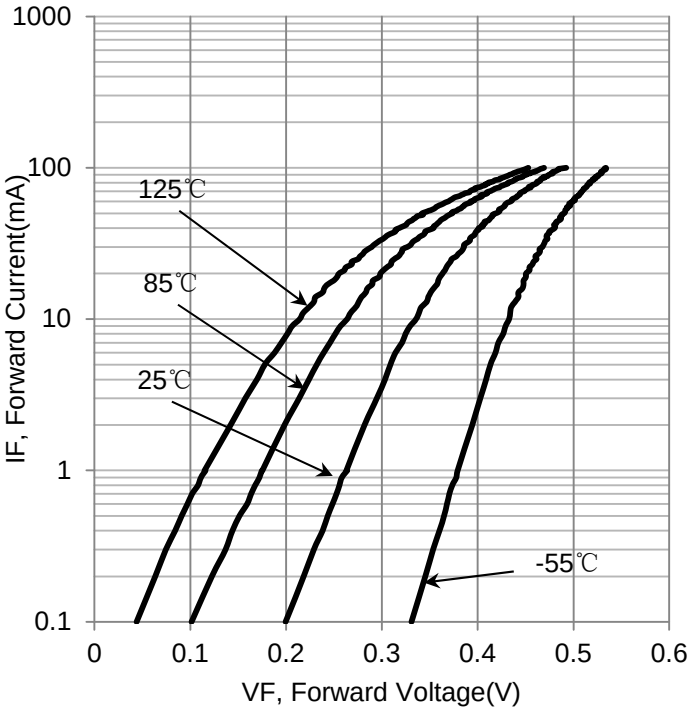
Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR−5 Board (Note 1) @ TA = 25ºC Derate above 25ºC	PD	 225 1.8	 mW mW/ºC
Thermal Resistance, Junction–to–Ambient(Note 1)	RΘJA	556	ºC/W
Junction and Storage temperature	TJ,Tstg	−55~+125	° C

1. FR–5 = 1.0×0.75×0.062 in.

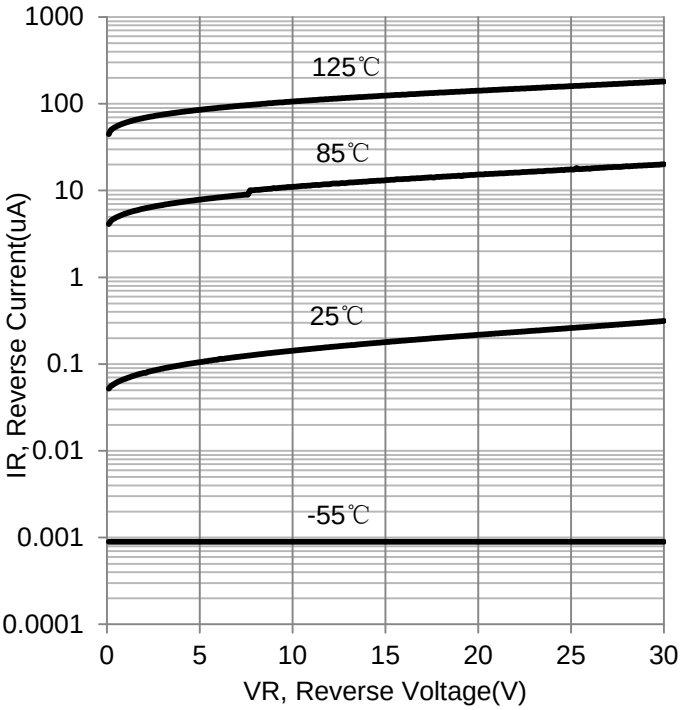
5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (IR = 10μAdc)	VBR	30	-	-	V
Reverse Voltage Leakage Current (VR = 25Vdc)	IR	-	0.5	2	μA
Diode Capacitance (VR =1.0V , f = 1.0 MHz)	CT	-	-	10	pF
Forward Voltage	VF				V
(IF = 0.1 mAdc)		-	0.22	0.24	
(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

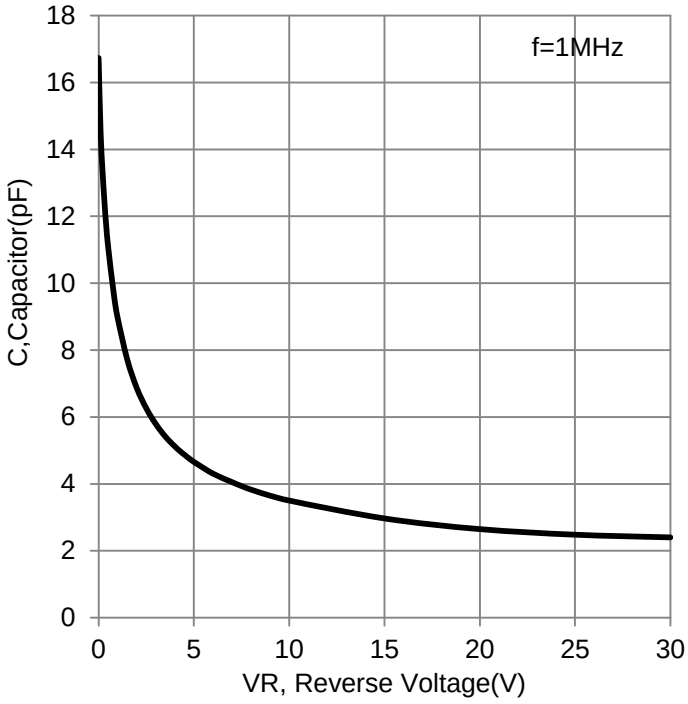
6. ELRCTRICAL CHARACTERISTICS CURVES



Forward Characteristics

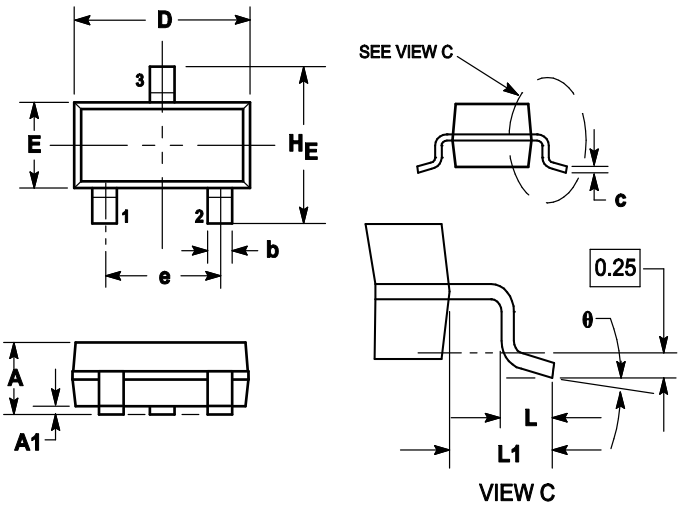


Reverse Characteristics



Capacitor Characteristics

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.

	MILLIMETERS			INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1	1.11	0.035	0.04	0.044
A1	0.01	0.06	0.1	0.001	0.002	0.004
b	0.37	0.44	0.5	0.015	0.018	0.02
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.9	3.04	0.11	0.114	0.12
E	1.20	1.3	1.4	0.047	0.051	0.055
e	1.78	1.9	2.04	0.07	0.075	0.081
L	0.10	0.2	0.3	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
H_E	2.10	2.4	2.64	0.083	0.094	0.104
θ	0°	---	10°	0°	---	10°

8.SOLDERING FOOTPRINT