

S-LBAT54CLT1G

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 V (Typ) @ IF = 10 mA

2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
S-LBAT54CLT1G	5C	3000/Tape&Reel
S-LBAT54CLT3G	5C	13000/Tape&Reel

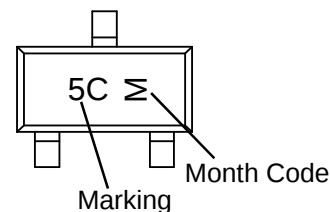
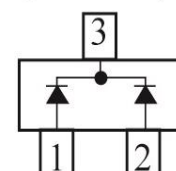
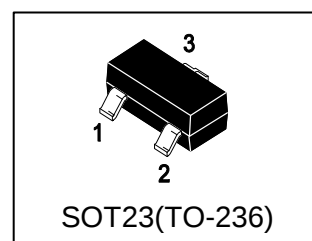
3. MAXIMUM RATINGS(Ta = 25°C)

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) @ TA = 25°C Derate above 25°C	PD	225 2.25	mW mW/°C
Thermal Resistance, Junction-to-Ambient(Note 1)	RθJA	445	°C/W
Junction and Storage temperature	TJ,Tstg	-55~+125	°C

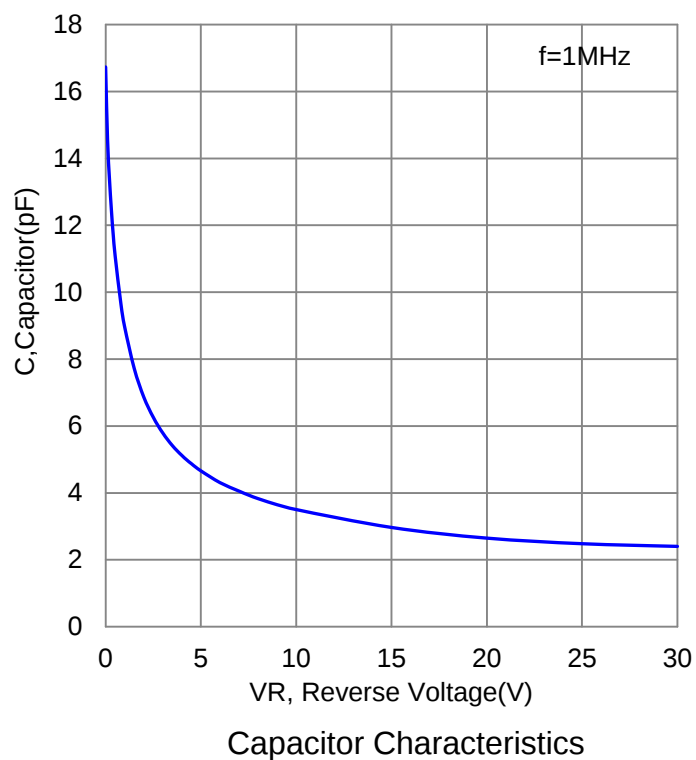
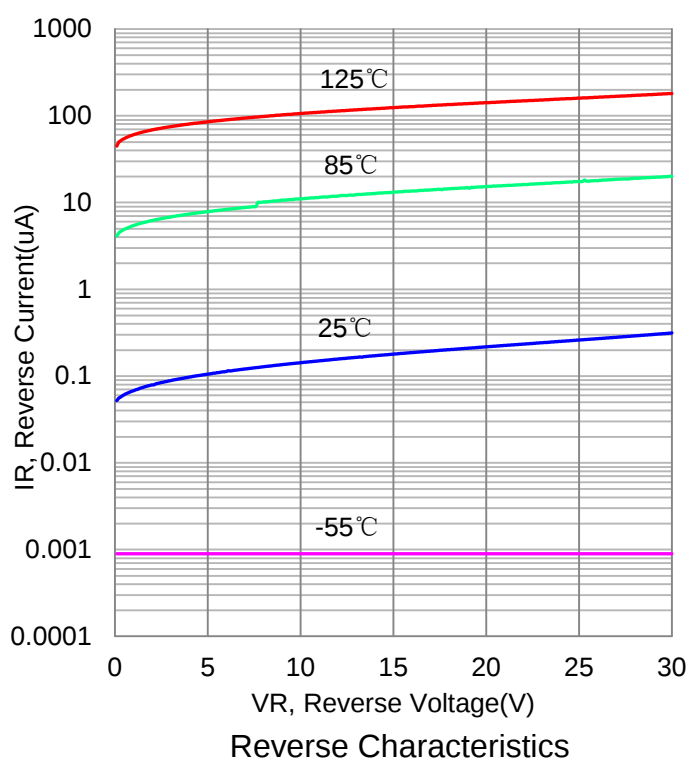
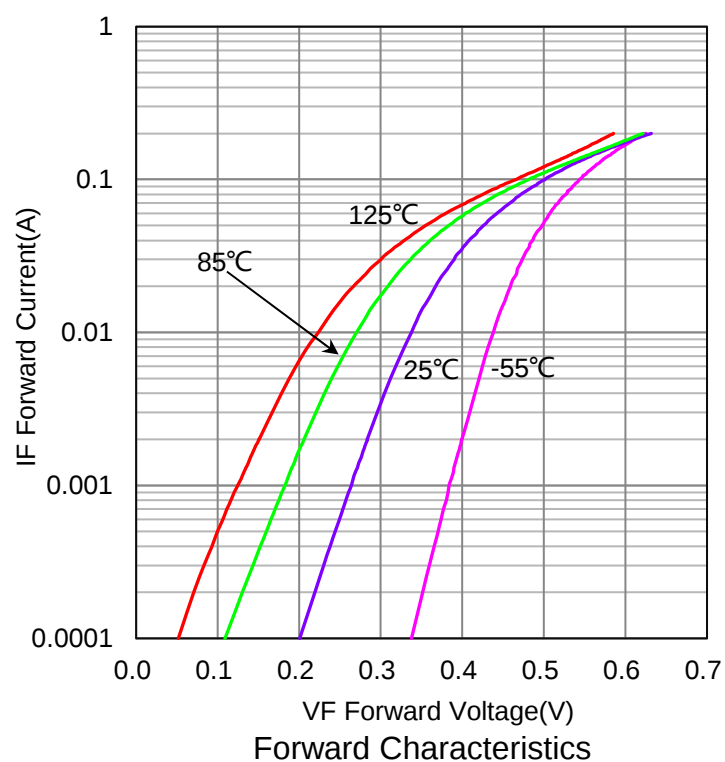
1. FR-5 = 1.0×0.75×0.062 in.



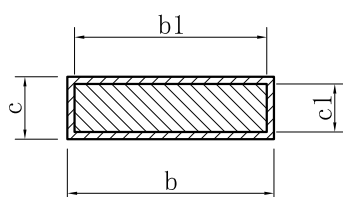
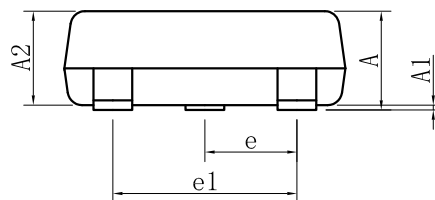
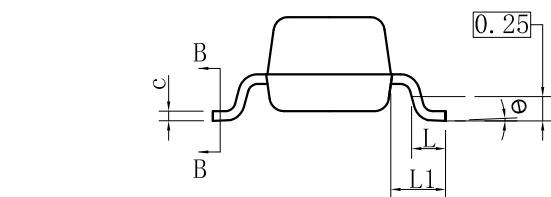
5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (IR = 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) (IF = 1 mA) (IF = 10 mA) (IF = 30 mA) (IF = 100 mA)	VF	-	0.22	0.24	V
		-	0.29	0.32	
		-	0.35	0.4	
		-	0.41	0.5	
		-	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

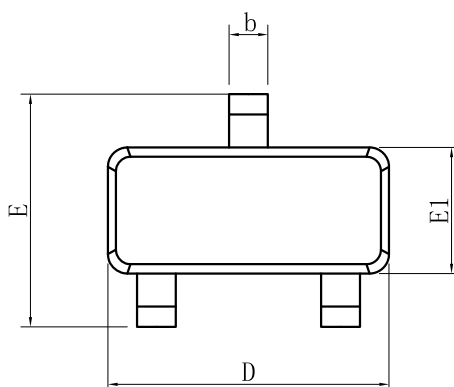
6. ELECTRICAL CHARACTERISTICS CURVES



7.OUTLINE AND DIMENSIONS



SECTION B-B

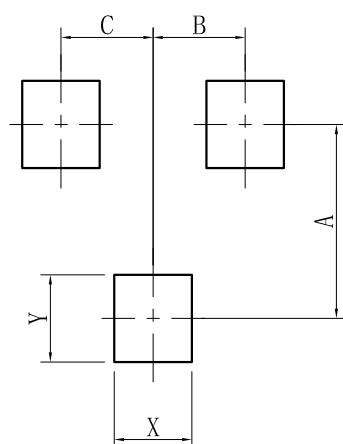


SOT23			
DIM	MIN	NOR	MAX
A	0.89	–	1.12
A1	0.01	–	0.10
A2	0.88	0.95	1.02
b	0.30	–	0.50
b1	0.30	0.40	0.45
c	0.08	–	0.20
c1	0.08	0.10	0.16
D	2.80	2.90	3.04
E	2.10	–	2.64
E1	1.20	1.30	1.40
e	0.95BSC		
e1	1.90BSC		
L	0.40	0.46	0.60
L1	0.54REF		
θ	0°	–	8°
All Dimensions in mm			

GENERAL NOTES

- 1.Top package surface finish $Ra0.4 \pm 0.2\mu m$
- 2.Bottom package surface finish $Ra0.7 \pm 0.2\mu m$
- 3.Side package surface finish $Ra0.4 \pm 0.2\mu m$

8.SOLDERING FOOTPRINT



SOT-23	
DIM	(mm)
X	0.80
Y	0.90
A	2.00
B	0.95
C	0.95

DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
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