

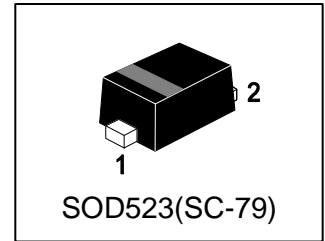
LBAT54XV2T1G

S-LBAT54XV2T1G

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
LBAT54XV2T1G	JV	3000/Tape&Reel
LBAT54XV2T5G	JV	8000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Reverse Voltage	VR	30	V

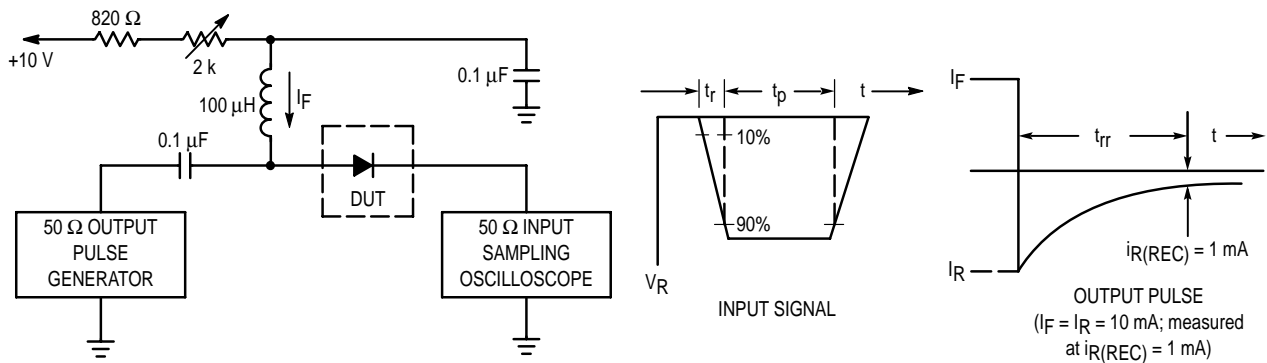
4. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	200 1.57	mW mW/°C
Thermal Resistance, Junction-to-Ambient	RθJA	635	°C/W
Junction and Storage temperature	TJ, Tstg	-55 ~ +150	°C

1. FR-5 = 1.0×0.75×0.062 in.

5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

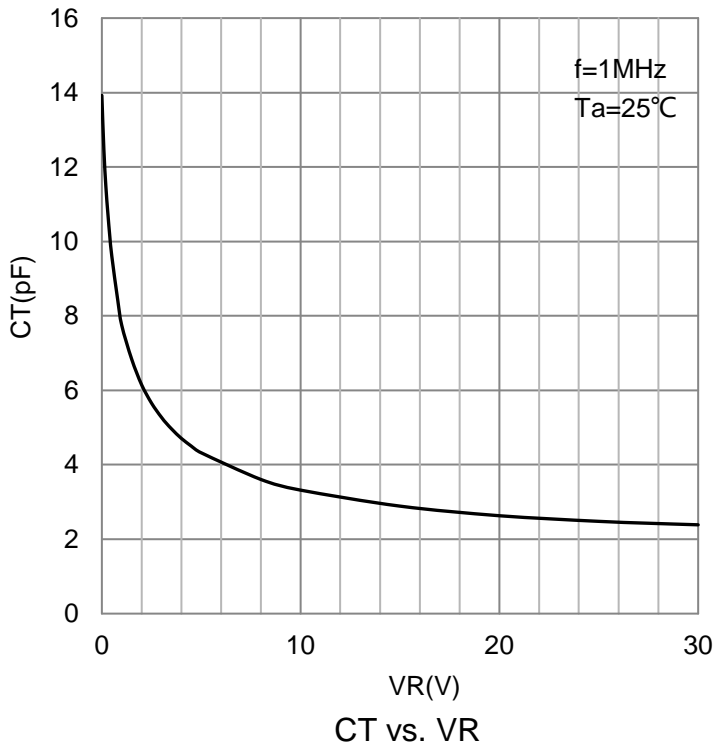
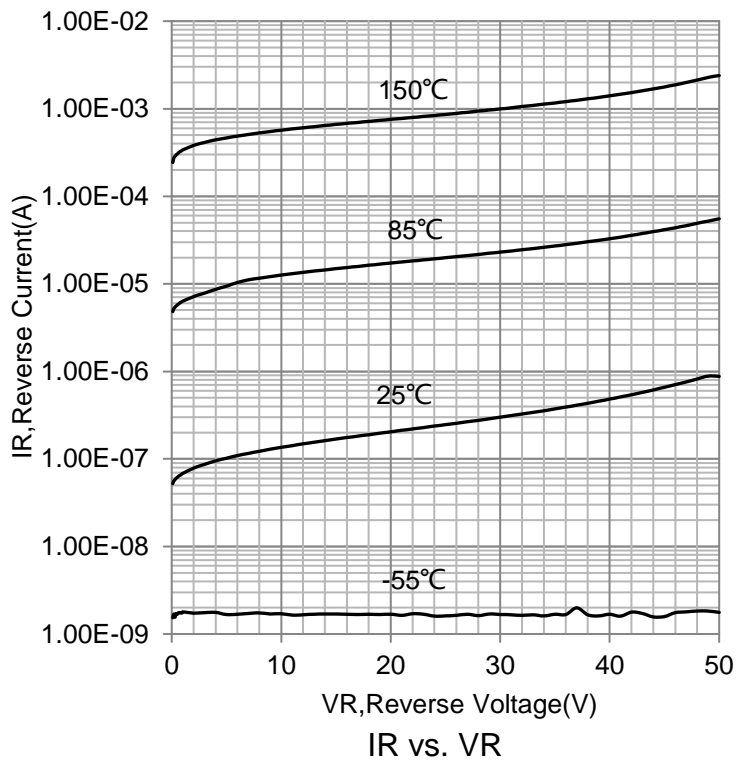
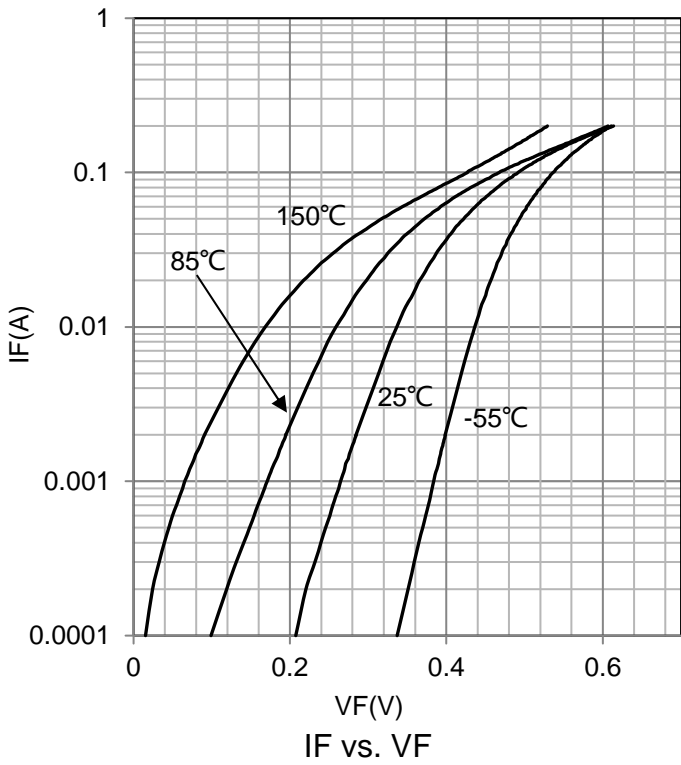
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (IR = 10 μA)	VBR	30	-	-	V
Total Capacitance (VR = 1.0 V, f = 1.0 MHz)	CT	-	-	10	pF
Reverse Leakage (VR = 25 V)	IR	-	0.5	2	μA
Forward voltage (IF = 0.1mA) (IF = 1mA) (IF = 10mA) (IF = 30mA) (IF = 100mA)	VF	- - - - -	0.22 0.29 0.35 0.41 0.52	0.24 0.32 0.4 0.5 1	V
Reverse Recovery Time (IF = IR = 10 mA, IR(REC) = 1.0 mA)	trr	-	-	5	nS
Forward Current (DC)	IF	-	-	200	mA
Repetitive Peak Forward Current	IFRM	-	-	300	mA
Non-Repetitive Peak Forward Current (t < 1.0 s)	IFSM	-	-	600	mA



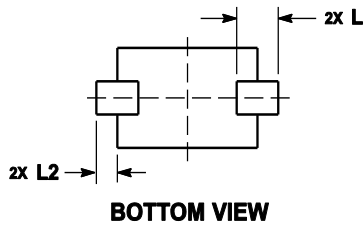
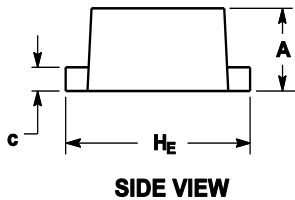
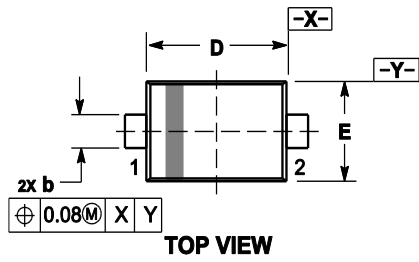
- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10 mA.
 2. Input pulse is adjusted so $I_{R(peak)}$ is equal to 10 mA.
 3. $t_p \gg t_{rr}$

RECOVERY TIME EQUIVALENT TEST CIRCUIT

6.ELECTRICAL CHARACTERISTICS CURVES



7. OUTLINE AND DIMENSIONS

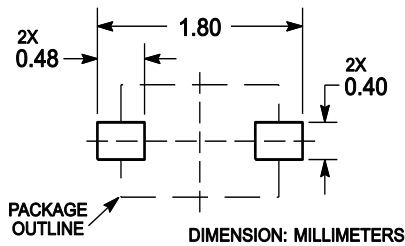


Notes:

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	0.50	0.60	0.70	0.020	0.024	0.028
b	0.25	0.30	0.35	0.010	0.012	0.014
c	0.07	0.14	0.20	0.003	0.006	0.008
D	1.10	1.20	1.30	0.043	0.047	0.051
E	0.70	0.80	0.90	0.028	0.031	0.035
H _E	1.50	1.60	1.70	0.059	0.063	0.067
L	0.30 REF			0.012 REF		
L ₂	0.15	0.20	0.25	0.006	0.008	0.010

8. SOLDERING FOOTPRINT



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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