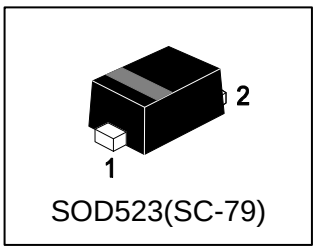
LBAT54XV2T1G
S-LBAT54XV2T1G

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



SOD523(SC-79)

2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBAT54XV2T1G	JV	3000/Tape&Reel
LBAT54XV2T5G	JV	8000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25ºC)

Parameter	Symbol	Limits	Unit
Reverse Voltage	VR	30	V

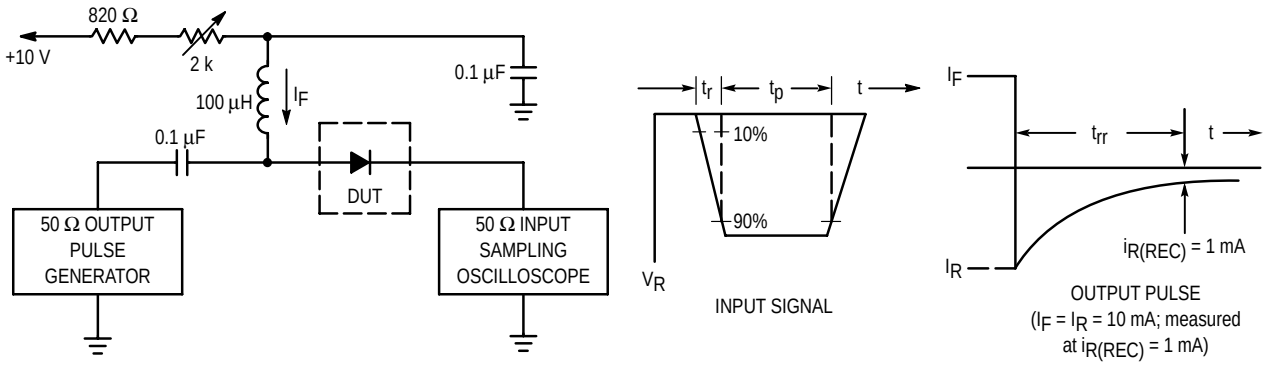
4. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR−5 Board (Note 1) @ TA = 25ºC Derate above 25ºC	PD	 200 1.57	 mW mW/ºC
Thermal Resistance, Junction–to–Ambient	RΘJA	635	ºC/W
Junction and Storage temperature	TJ,Tstg	−40～+125	ºC

1. FR–5 = 1.0×0.75×0.062 in.

5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

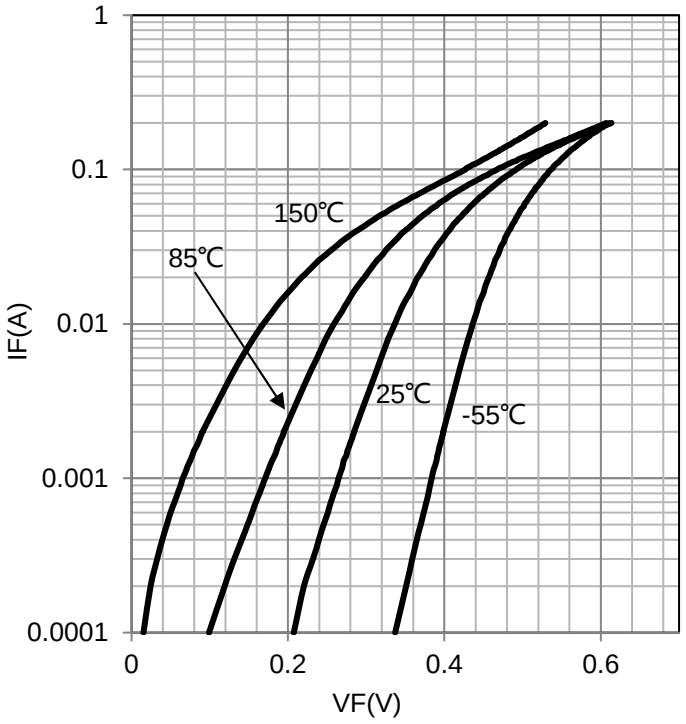
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (IR = 10 μA)	VBR	30	-	-	V
Total Capacitance (VR = 1.0 V, f = 1.0 MHz)	CT	-	-	10	pF
Reverse Leakage (VR = 25 V)	IR	-	0.5	2	μA
Forward voltage	VF				V
(IF =0.1mA)		-	0.22	0.24	
(IF =1mA)		-	0.29	0.32	
(IF =10mA)		-	0.35	0.4	
(IF =30mA)		-	0.41	0.5	
(IF =100mA)		-	0.52	1	
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



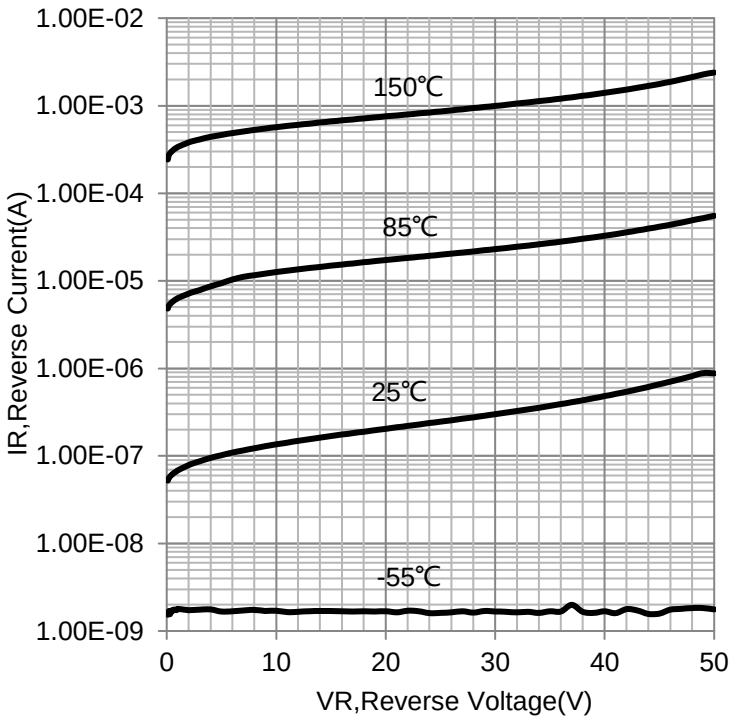
Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10 mA.
2. Input pulse is adjusted so $I_{R(peak)}$ is equal to 10 mA.
3. $t_p \gg t_{rr}$

RECOVERY TIME EQUIVALENT TEST CIRCUIT

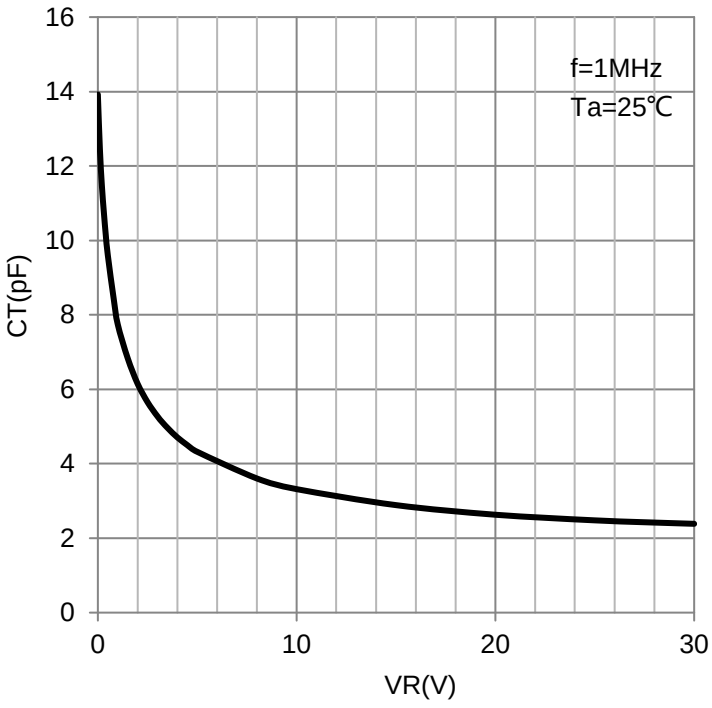
6.ELECTRICAL CHARACTERISTICS CURVES



IF vs. VF

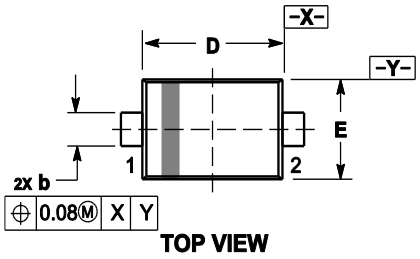


IR vs. VR

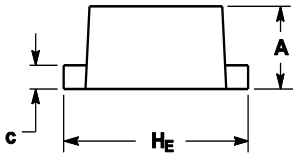


CT vs. VR

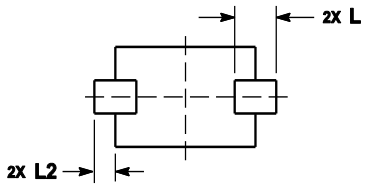
7.OUTLINE AND DIMENSIONS



TOP VIEW



SIDE VIEW



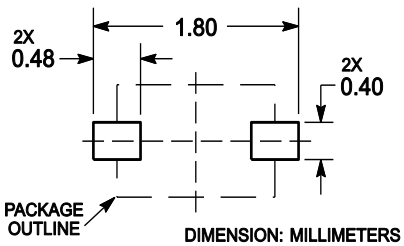
BOTTOM VIEW

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	0.50	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



DIMENSION: MILLIMETERS