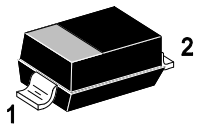
LBAT46T1G
S-LBAT46T1G

Schottky Power Rectifier



SOD123

1. FEATURES

- Very small conduction losses
- Negligible switching losses
- Low forward voltage drop
- Surface mount device
- Lead and Mounting Surface Temperature for Soldering Purposes: 260°C Max. for 10 Seconds
- 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.

2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBAT46T1G	Z46	3000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25ºC)

Parameter	Symbol	Limits	Unit
Repetitive peak reverse voltage	VRRM	100	V
Continuous forward current	IF	150	mA
Surge Non repetitive forward current	IFSM	1	A
Power Dissipation	PD	250	mW
Storage temperature range	Tstg	-55~+150	℃
Maximum operating junction temperature(Note 1)	Tj	150	℃
Maximum soldering temperature(Note 1)	TL	260	℃

1. Pulse test: tp = 380 μs, δ < 2 %

4. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Thermal resistance from junction to ambient	RθJA	500	℃/W

2.On epoxy printed circuit board with recommended pad layout

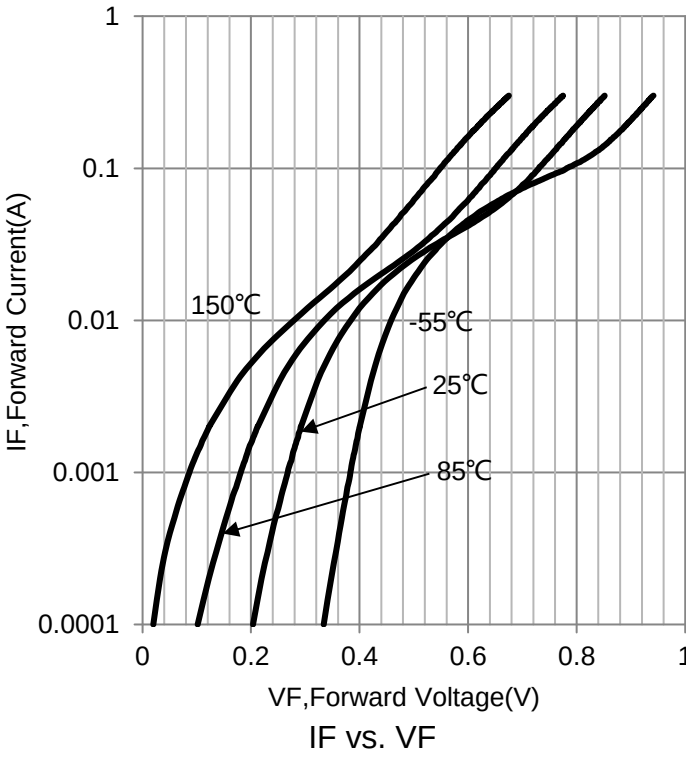
5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Leakage Current(Tj = 25°C)	IR(Note 3)				μA
(VR=1.5V)		-	-	0.5	
(VR=10V)		-	-	0.8	
(VR=50V)		-	-	2	
(VR=75V)		-	-	5	
Reverse Leakage Current(Tj = 60°C)					
(VR=1.5V)		-	-	5	
(VR=10V)		-	-	7.5	
(VR=50V)		-	-	15	
(VR=75V)		-	-	20	
Forward Voltage(Tj = 25°C)	VF				V
(IF=0.1mA)		-	-	0.25	
(IF=10mA)		-	-	0.45	
(IF=250mA)		-	-	1	
Diode Capacitance	Cd				pF
(VR =0V, f=1.0MHz)		-	11	-	
(VR =1V, f=1.0MHz)		-	6	-	

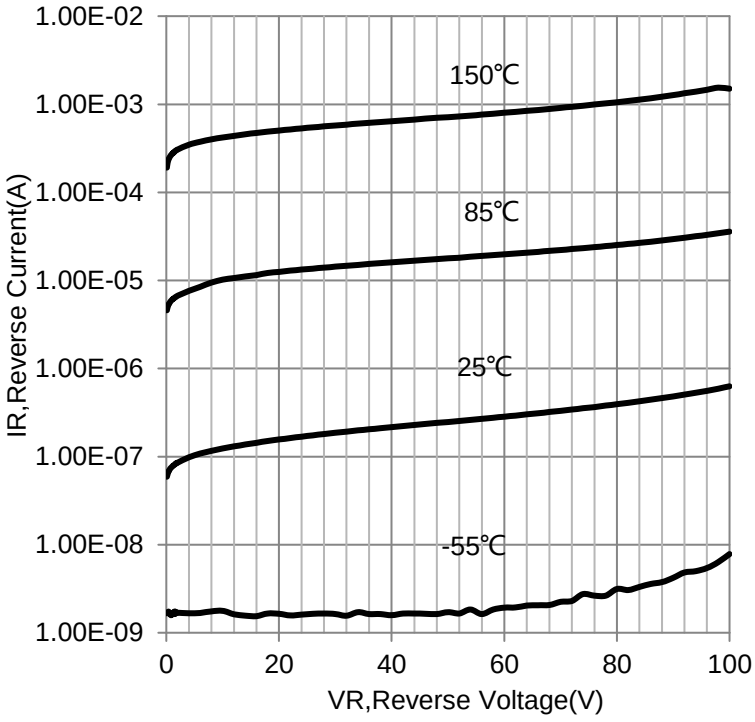
3. Pulse test: tp = 5 ms, δ < 2 %

4. Pulse test: tp = 380 μs, δ < 2 %

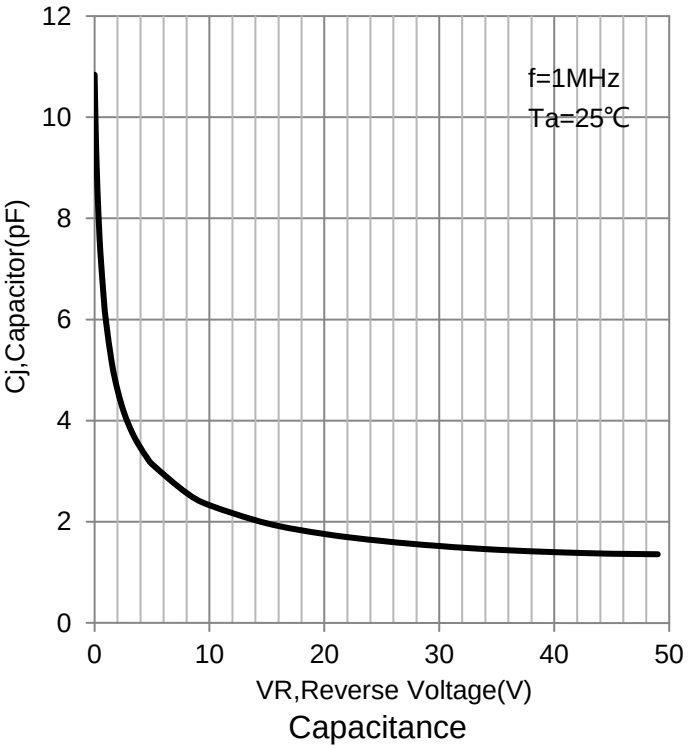
6.ELECTRICAL CHARACTERISTICS CURVES



IF vs. VF

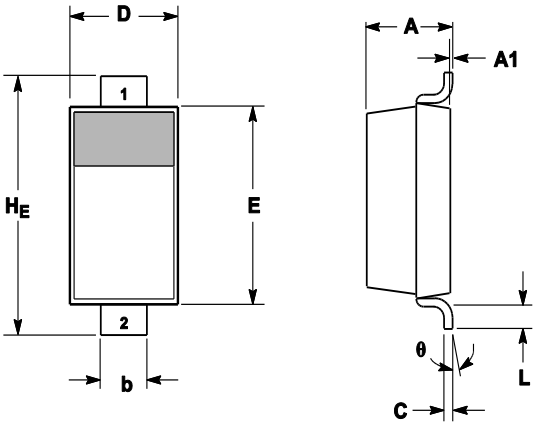


IR vs. VR



Capacitance

7.OUTLINE AND DIMENSIONS

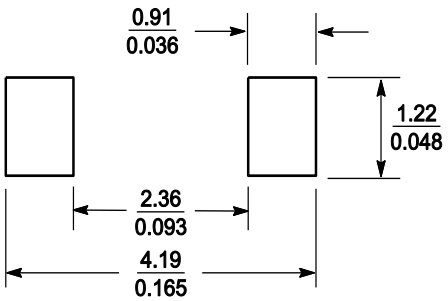


Notes:

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	0.94	1.17	1.35	0.037	0.046	0.053
A1	0.00	0.05	0.10	0.000	0.002	0.004
b	0.51	0.61	0.71	0.020	0.024	0.028
c	---	---	0.15	---	---	0.006
D	1.40	1.60	1.80	0.055	0.063	0.071
E	2.54	2.69	2.84	0.100	0.106	0.112
H_E	3.56	3.68	3.86	0.140	0.145	0.152
L	0.25	---	---	0.010	---	---
θ	0°	---	10°	0°	---	10°

8.SOLDERING FOOTPRINT



SCALE 10:1 (mm / inches)