

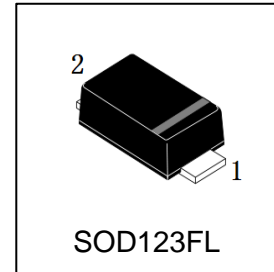
# LMBR130FT1G

## S-LMBR130FT1G

### Schottky Barrier Diode

#### 1. FEATURES

- Low power losses, high efficiency.
- Guardring for over voltage protection.
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- 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
LMBR130FT1G	13	3000/Tape&Reel
S-LMBR130FT1G	13	3000/Tape&Reel

#### 3. MAXIMUM RATINGS(Ta = 25°C)

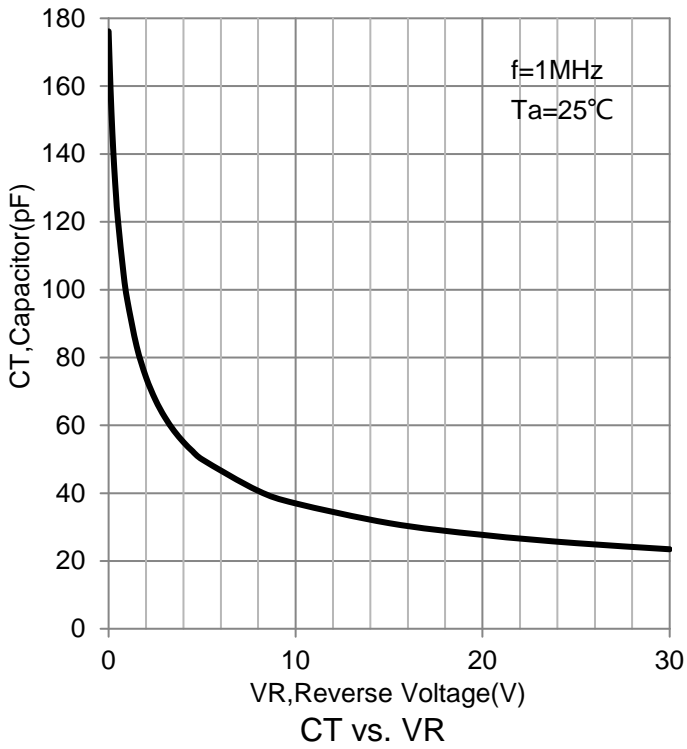
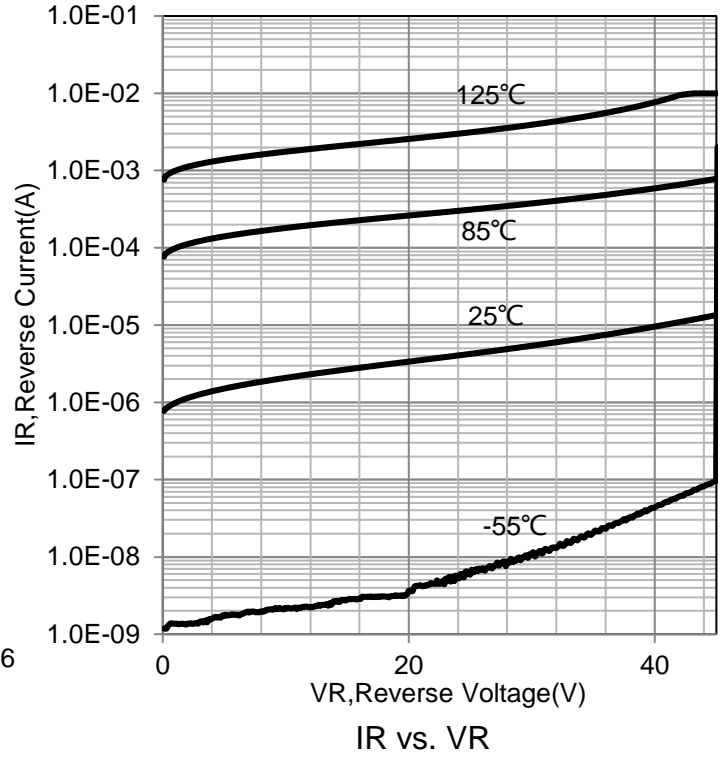
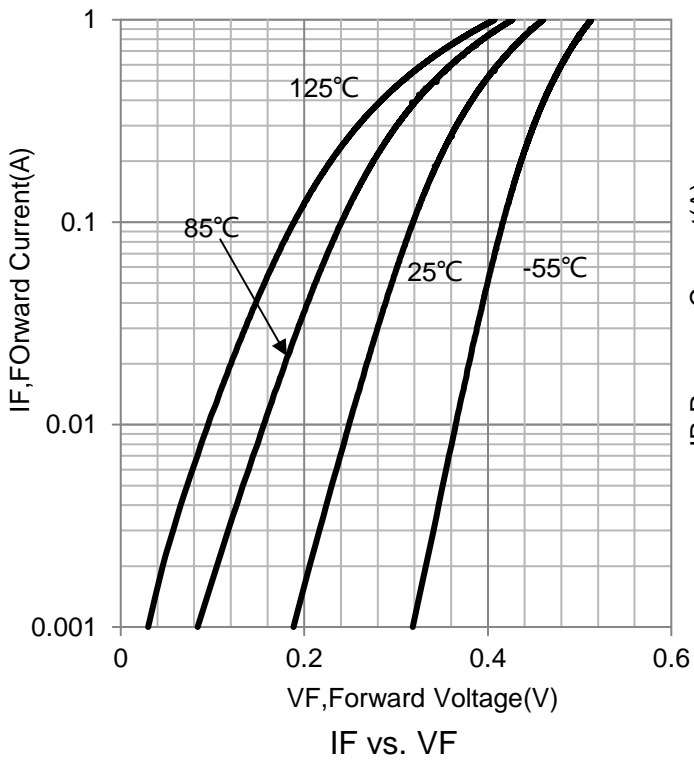
Parameter	Symbol	Limits	Unit
Maximum repetitive peak reverse voltage	VRRM	30	V
Maximum RMS voltage	VRMS	21	V
Maximum DC blocking voltage	VDC	30	V
Maximum average forward rectified current at TC = 75°C	IF(AV)	1	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30	A
Power Dissipation	PD	400	mW
Typical thermal resistance (Note 1)	RθJA	170	°C/W
	RθJL	40	
Operating junction temperature range	TJ	-55 ~ +150	°C
storage temperature range	TSTG	-65 ~ +175	°C

**4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)**

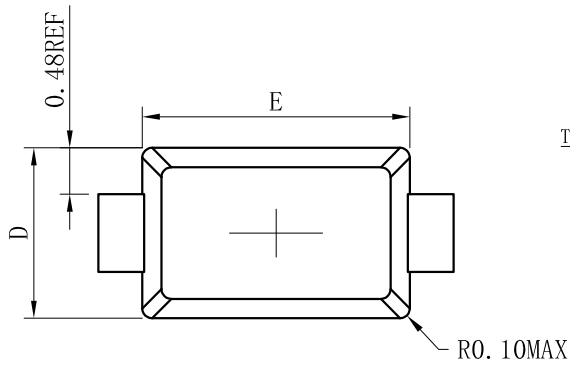
Characteristic	Symbol	Min	Typ.	Max	Unit
Maximum instantaneous forward (IF = 0.1 A, TJ = 25°C) (IF = 0.7 A, TJ = 25°C) (IF = 1.0 A, TJ = 25°C)	VF	- - -	- - -	0.35 0.45 0.5	V
Maximum repetitive peak reverse voltage (IR=500μA)	VR	30	-	-	
Maximum DC reverse current at rated DC blocking voltage TA = 25°C Tj = 125°C	IR	- -	- -	0.5 10	mA
Junction capacitance at 4.0V, 1MHz	CJ	-	120	-	pF
Junction capacitance at 2.0V, 1MHz		-	160	-	

Note: 1. 8.0mm<sup>2</sup> (.013mm thick) land areas

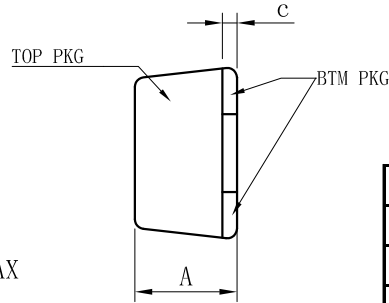
**5.ELECTRICAL CHARACTERISTICS CURVES**



## 6.OUTLINE AND DIMENSIONS



TOP VIEW

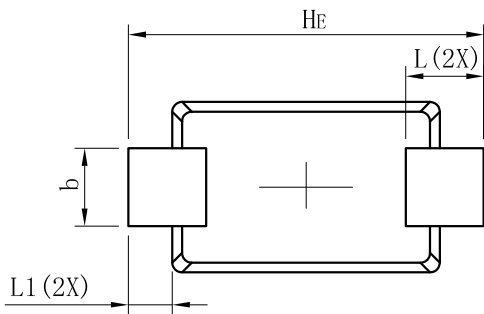


SIDE VIEW

SOD123FL			
DIM	MIN	NOR	MAX
A	0.90	1.05	1.15
b	0.75	0.80	0.95
L	0.50	0.80	1.10
E	2.60	2.75	2.90
D	1.60	1.75	1.90
HE	3.50	3.65	3.80
c	0.12	0.17	0.22
L1	0.25	0.45	0.65
All Dimensions in mm			

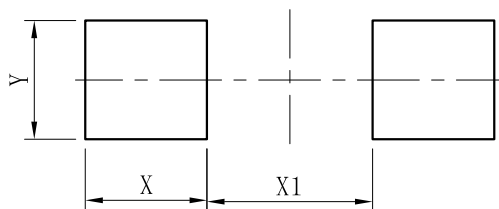
### GENERAL NOTES

- 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  $Ra0.4 \pm 0.2\mu m$



BOTTOM VIEW

## 7.SOLDERING FOOTPRINT



DIM	(mm)
X	1.20
Y	1.10
X1	2.00

## **DISCLAIMER**

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