

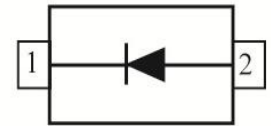
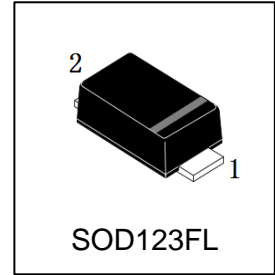
# LMBR160FT1G

## S-LMBR160FT1G

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
LMBR160FT1G	16	3000/Tape&Reel
S-LMBR160FT1G	16	3000/Tape&Reel

### 3. MAXIMUM RATINGS(Ta = 25°C)

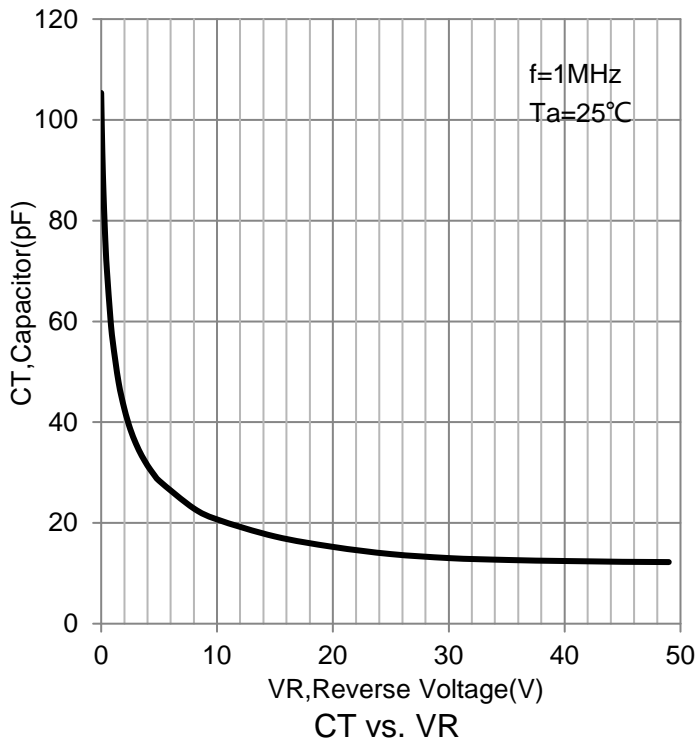
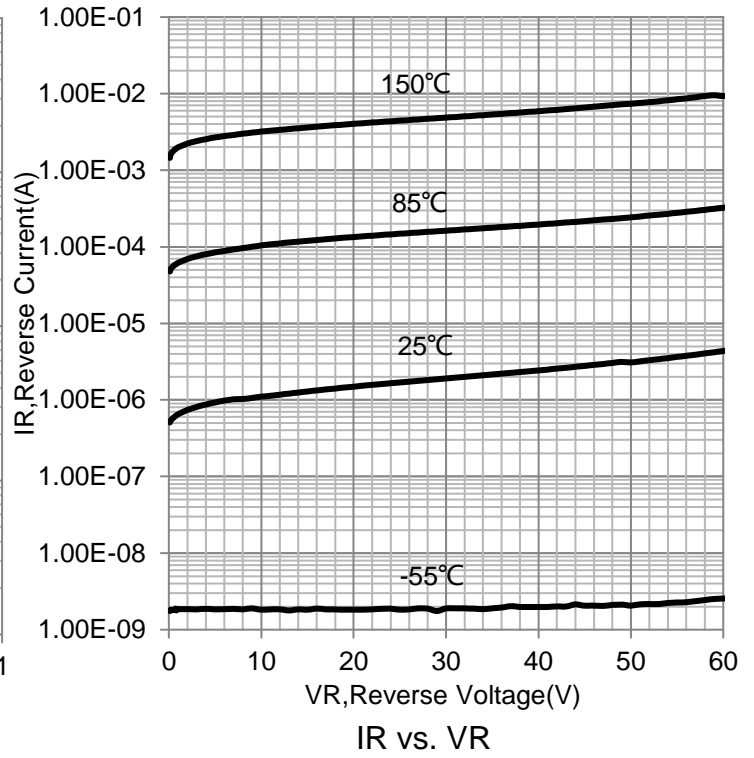
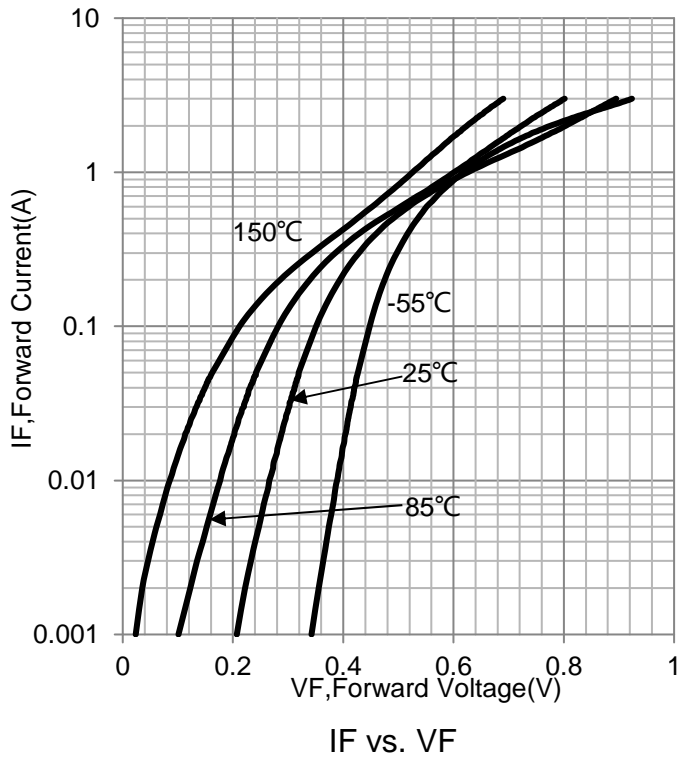
Parameter	Symbol	Limits	Unit
Maximum repetitive peak reverse voltage	VRRM	60	V
Maximum RMS voltage	VRMS	42	V
Maximum DC blocking voltage	VDC	60	V
Maximum average forward rectified current at TA = 75°C	IF(AV)	1	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC 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)

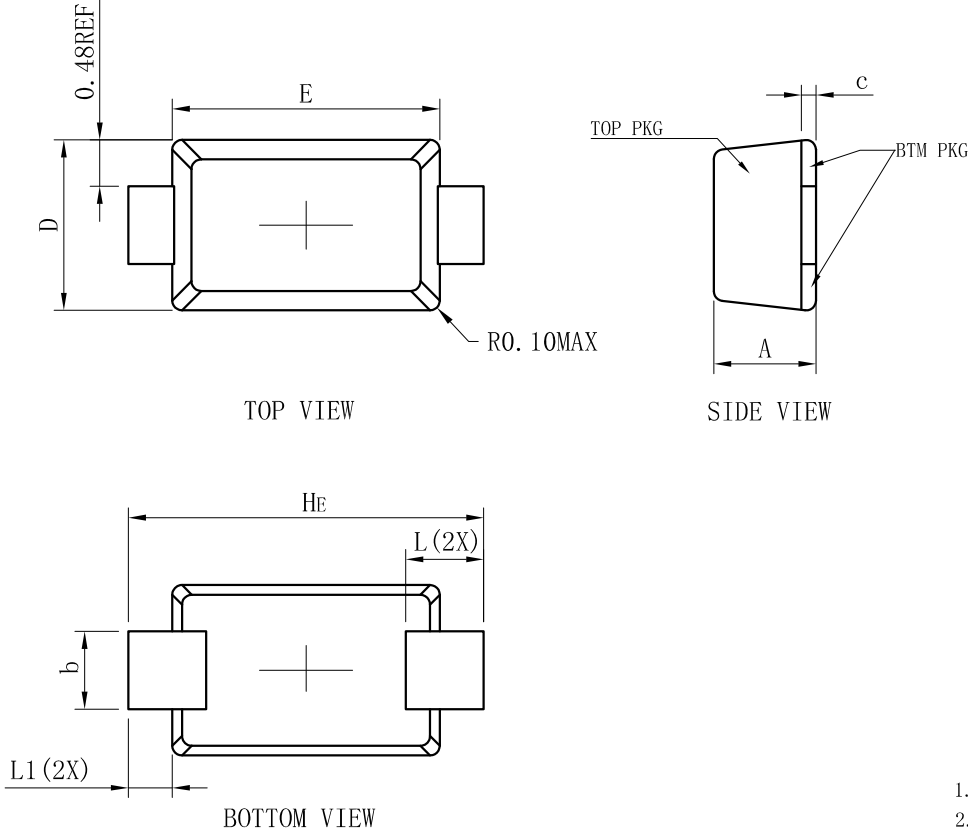
Characteristic	Symbol	Min	Typ.	Max	Unit
Maximum instantaneous forward (IF = 1.0 A, TJ = 25°C)	VF	-	-	0.7	V
Maximum repetitive peak reverse voltage (IR=500μA)	VR	60	-	-	V
Maximum DC reverse current at rated DC blocking voltage TA = 25°C Tj = 125°C	IR	-	-	0.5	mA
		-	-	10	
Junction capacitance at 4.0V, 1MHz	CJ	-	32	-	pF
Junction capacitance at 2.0V, 1MHz		-	40	-	

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

**5.ELECTRICAL CHARACTERISTICS CURVES**



### 6.OUTLINE AND DIMENSIONS

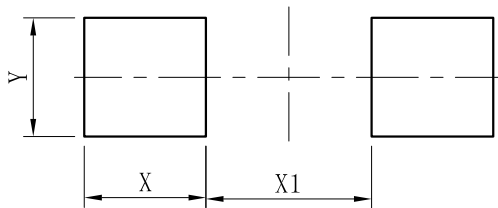


SOD123FL			
DIM	MIN	NOR	MAX
A	0.90	1.05	1.15
b	0.75	0.80	0.95
L	0.80REF.		
E	2.60	2.75	2.90
D	1.60	1.75	1.90
HE	3.50	3.65	3.80
c	0.12	0.17	0.22
L1	0.45REF.		
All Dimensions in mm			

#### GENERAL NOTES

- 1.Top package surface finish  $\text{Ra}0.4\pm 0.2\mu\text{m}$
- 2.Bottom package surface finish  $\text{Ra}0.7\pm 0.2\mu\text{m}$
- 3.Side package surface finish  $\text{Ra}0.4\pm 0.2\mu\text{m}$

### 7.SOLDERING FOOTPRINT



DIM	(mm)
X	1.20
Y	1.10
X1	2.00