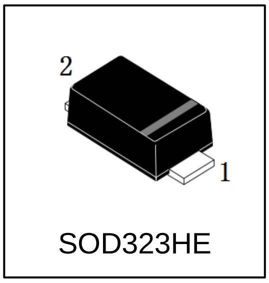
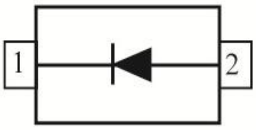
LMBR140ET1G
S-LMBR140ET1G

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.
- Low power loss,high efficiency.
- For use in low voltage high frequency inverters,free wheeling,and polarity protection applications.
- Guardring for over voltage protection.
- High temperature soldering guaranteed:260°C/10 seconds at terminals.

2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LMBR140ET1G	14	3000/Tape&Reel
S-LMBR140ET1G	14	3000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25ºC)

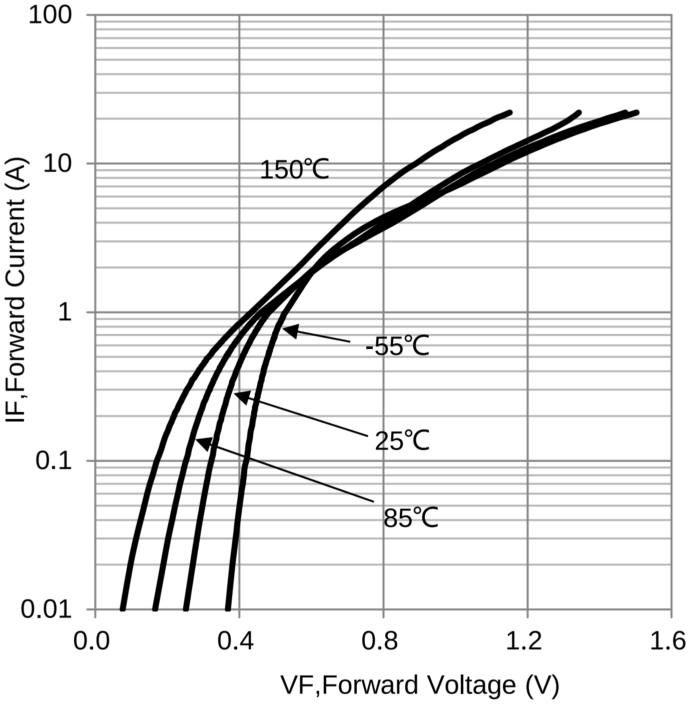
Parameter	Symbol	Limits	Unit
Maximum repetitive peak reverse voltage	VRRM	40	V
Maximum RMS voltage	VRMS	28	V
Maximum DC blocking voltage	VDC	40	V
Maximum average forward rectified current at TC = 75°C	IF(AV)	1	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	22	A
Typical thermal resistance (Note 1)	RθJA	220	℃/W
	RθJL	50	
Operating junction temperature range	TJ	–55 ~ +125	℃
storage temperature range	TSTG	–55 ~ +150	℃

Note: 1. 8.0mm² (.013mm thick) land areas

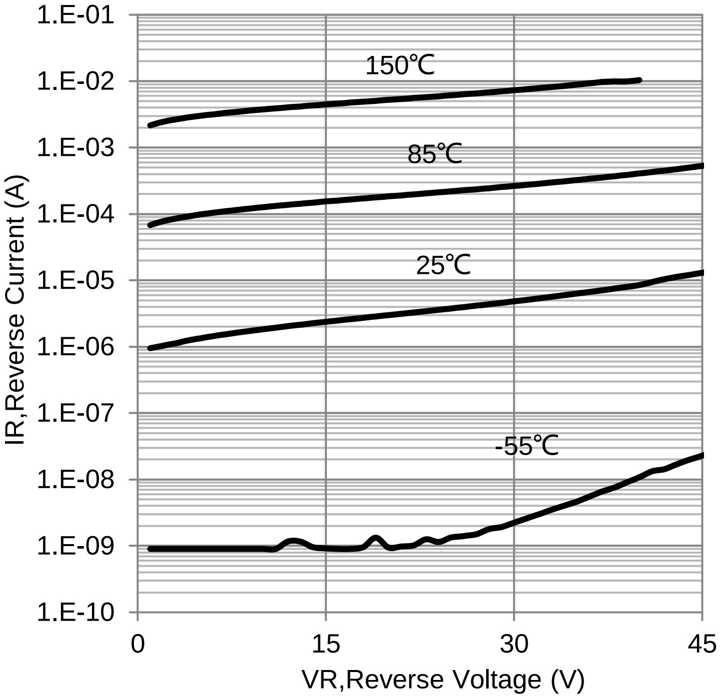
4. ELECTRICAL CHARACTERISTICS (Ta= 25ºC)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Maximum instantaneous forward (IF =0.7 A, TJ = 25°C) (IF = 1.0 A, TJ = 25°C)	VF	- -	- -	0.48 0.55	V
Maximum DC reverse current at rated DC blocking voltage TA = 25°C TJ = 125°C	IR	- -	5 2.5	30 10	uA mA
Typical junction capacitance at 4.0V, 1MHz	CJ	-	50	-	pF

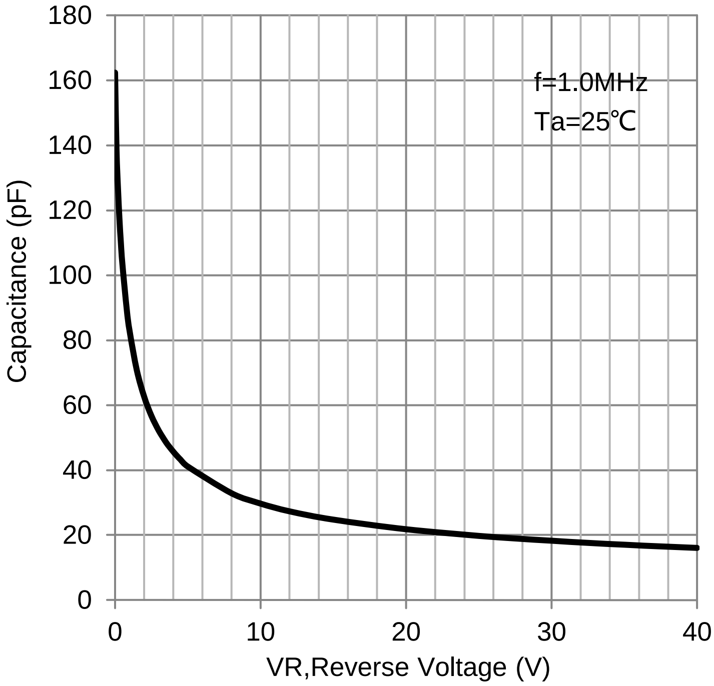
5. ELECTRICAL CHARACTERISTICS CURVES



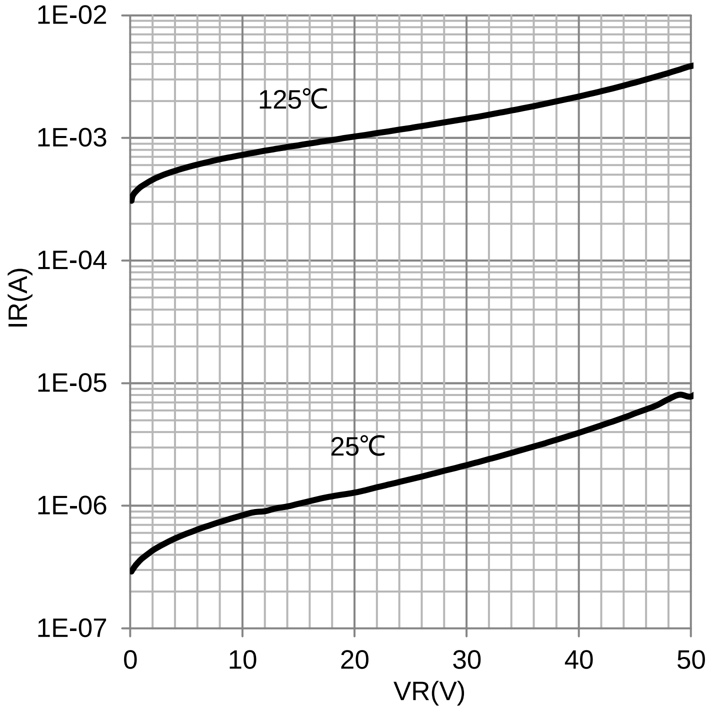
IF vs. VF



IR vs. VR

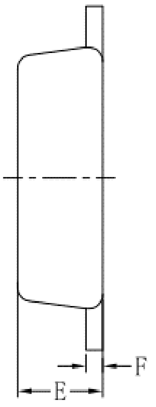


Capacitance

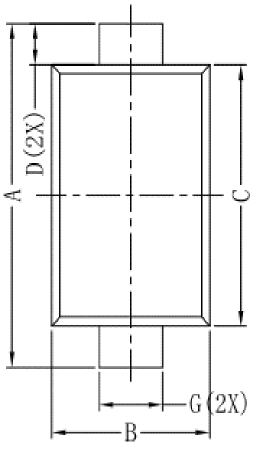


IR vs. VR

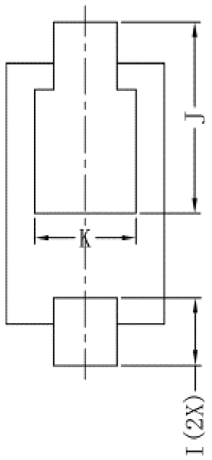
6.OUTLINE AND DIMENSIONS



SIDE VIEW



TOP VIEW



BOTTOM VIEW

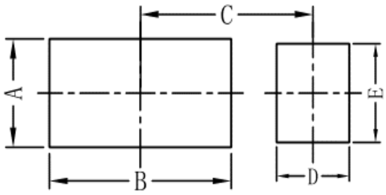
SOD323HE			
DIM	MIN	MAX	Typ.
A	2.30	2.70	2.55
B	1.20	1.35	1.25
C	1.75	1.95	1.90
D	-	-	0.30
E	0.55	0.75	0.67
F	0.10	0.20	0.15
G	0.45	0.65	0.50
I	0.40	0.70	0.50
J	1.15	1.55	1.40
K	-	-	0.80
All Dimensions in mm			

GENERAL NOTES

1. Top package surface finish Ra0.4±0.2um
2. Bottom package surface finish Ra0.7±0.2um

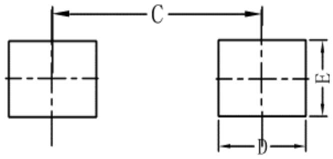
7.SOLDERING FOOTPRINT

RECOMMENDED PAD



SOD323HE	
DIM	(mm)
A	1.1
B	2.0
C	1.9
D	0.8
E	1.1

COMPATIBLE PAD



SOD323HE	
DIM	(mm)
D	1.0
E	0.8
C	2.4