

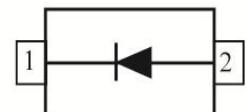
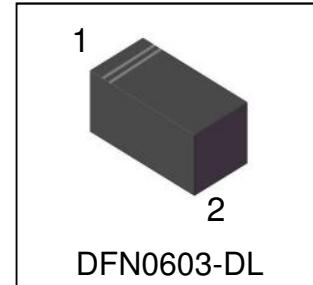
LMBR01S30ST5G

S-LMBR01S30ST5G

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 small surface mounting type.(DFN0603)
- Low IR.
- High reliability.



2. APPLICATIONS

- Low current rectification

3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LMBR01S30ST5G	S (Rotate 90°ccw)	15000/Tape&Reel

4. MAXIMUM RATINGS($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
DC Reverse Voltage	VR	30	V
Mean Rectifying Current	IO	100	mA
Peak Forward Surge Current	IFSM	2	A

5. THERMAL CHARACTERISTICS

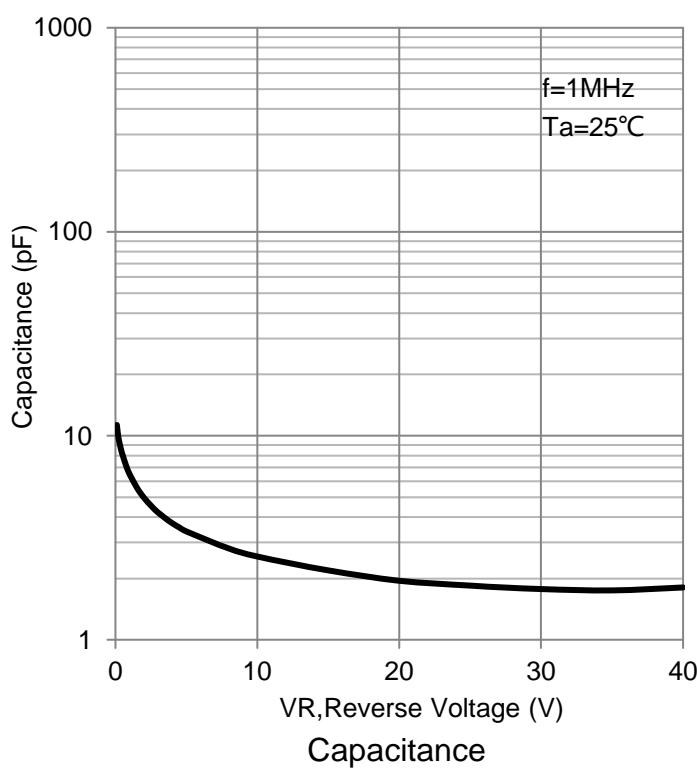
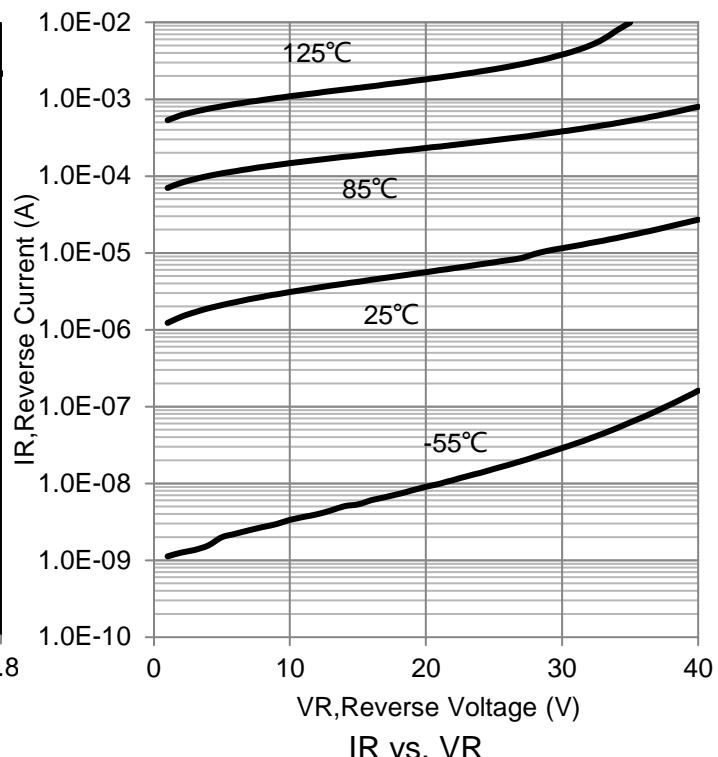
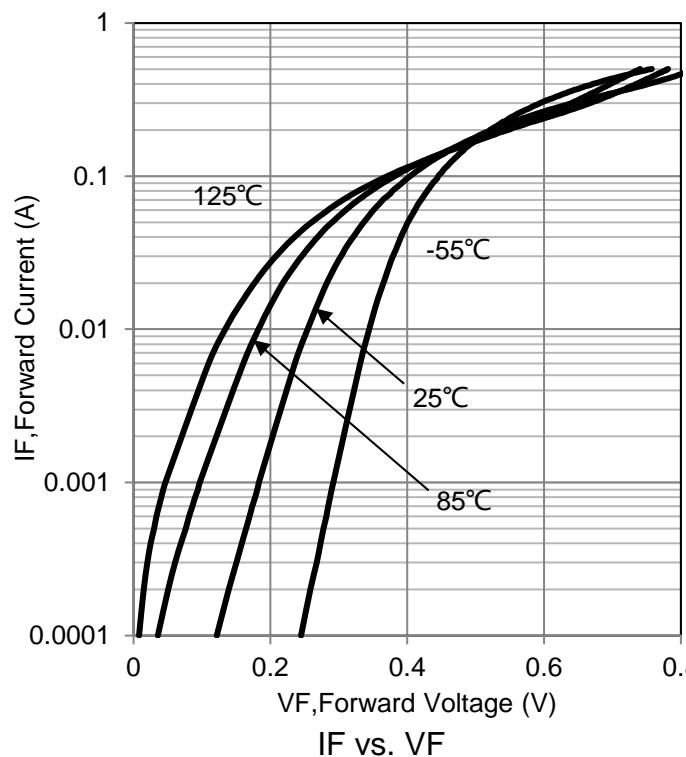
Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ $T_A = 25^\circ\text{C}$ Derate above 25°C	PD	200 1.58	mW mW/ $^\circ\text{C}$
Thermal Resistance, Junction-to-Ambient(Note 1)	$R_{\theta JA}$	635	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	100	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-40 ~ +100	$^\circ\text{C}$
Operating Temperature Range	T_{op}	-40 ~ +100	$^\circ\text{C}$

1. FR-5 = $1.0 \times 0.75 \times 0.062$ in.

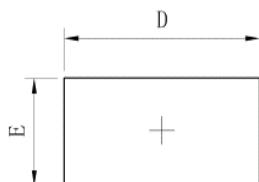
6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Voltage Leakage Current (VR = 10V) (VR = 30V)	IR	-	-	10	µA
		-	-	20	
Diode Capacitance (VR = 0V , f = 1.0 MHz)	CT	-	8.2	-	pF
Forward Voltage (IF = 60 mA) (IF = 10 mA)	VF	-	-	0.37	V
		-	-	0.3	

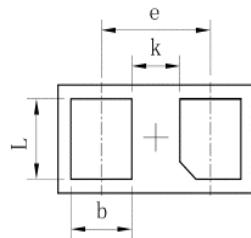
7. ELECTRICAL CHARACTERISTICS CURVES



8.OUTLINE AND DIMENSIONS



TOP VIEW



BOTTOM VIEW

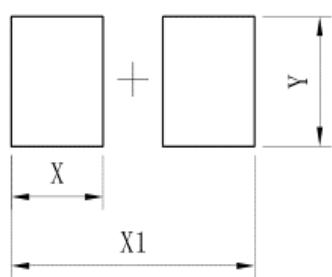


SIDE VIEW

DFN0603-DL			
Dim	Min	Typ.	Max
D	0.58	0.61	0.64
E	0.28	0.31	0.34
e	-	0.34	-
L	0.20	0.23	0.26
b	0.16	0.19	0.22
A	0.25	0.28	0.31
k	0.12	0.15	0.18

All Dimensions in mm

9.SOLDERING FOOTPRINT



DFN0603-DL	
DIM	(mm)
X	0.23
X1	0.61
Y	0.30