

MBR01S30S

S-MBR01S30S

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
MBR01S30S	S (Rotate 90° ccw)	15000/Tape&Reel

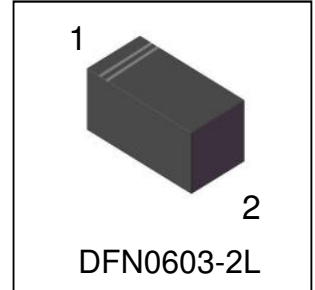
4. MAXIMUM RATINGS(Ta = 25°C)

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) @ TA = 25°C Derate above 25°C	PD	200 1.58	mW mW/°C
Thermal Resistance, Junction-to-Ambient(Note 1)	ROJA	635	°C/W
Junction Temperature	TJ	100	°C
Storage Temperature Range	Tstg	-40 ~ +100	°C
Operating Temperature Range	Top	-40 ~ +100	°C

1. FR-5 = 1.0×0.75×0.062 in.

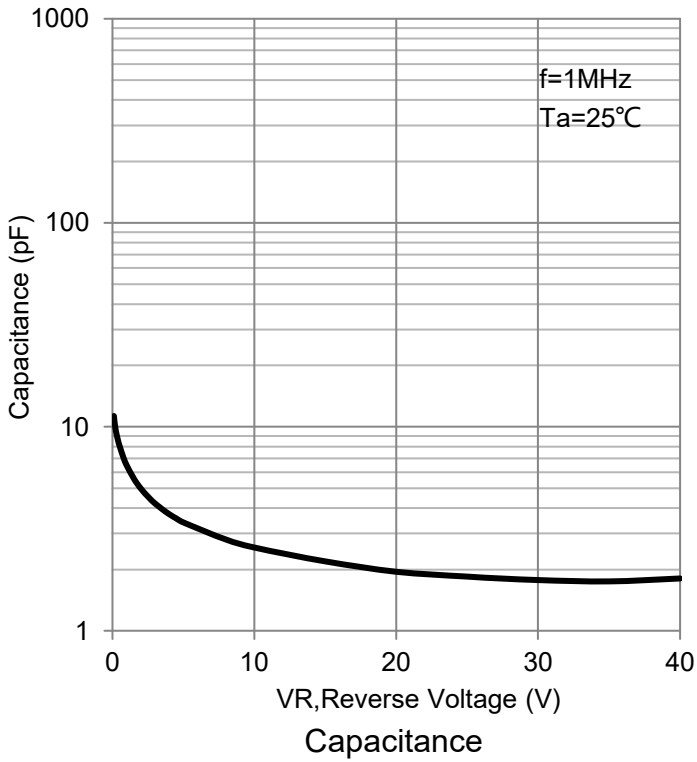
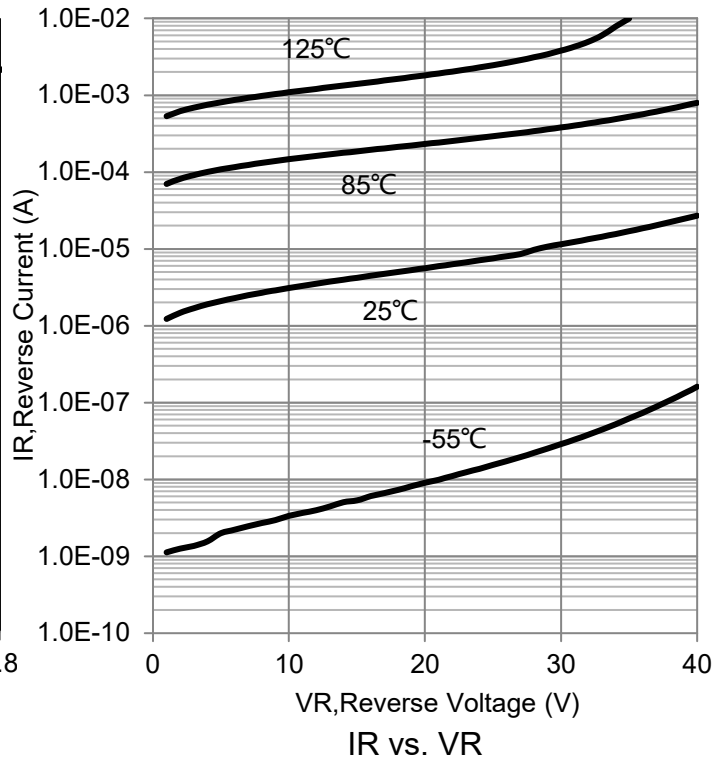
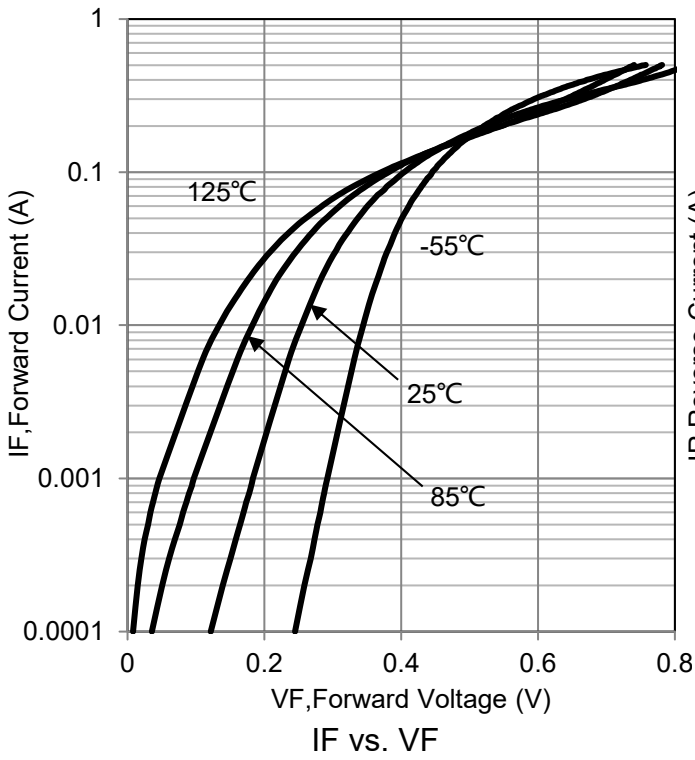


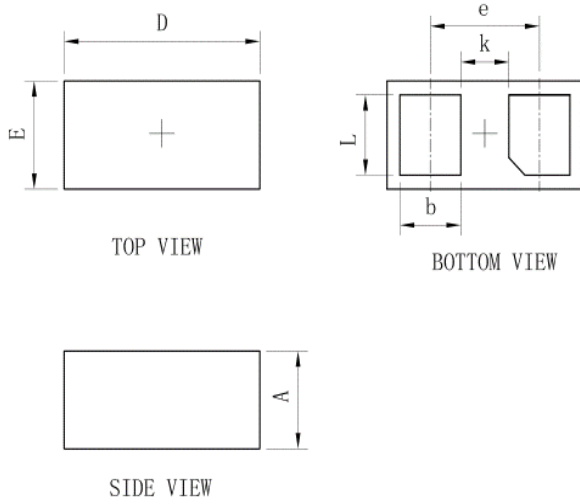
6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

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

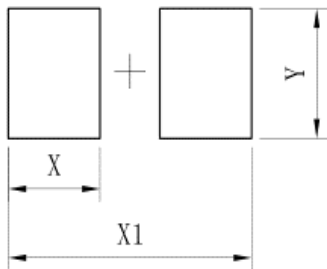


7. ELECTRICAL CHARACTERISTICS CURVES



8. OUTLINE AND DIMENSIONS


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

