

# Schottky barrier diode

## LRB551BS-30T5G

### ● Applications

High-frequency rectification  
Switching regulators

### ● Features

- 1) Small surface mounting type.
- 2) Ultra low  $V_F$  ( $V_F=0.45V$  Typ. at 0.5A)
- 3) High reliability.
- 4) We declare that the material of product compliance with RoHS requirements.
- 5) S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements;  
AEC-Q101 Qualified and PPAP Capable.

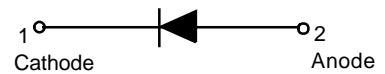
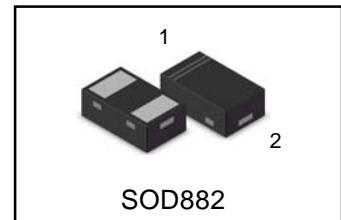
### ● Construction

Silicon epitaxial planar

### ● Device Marking and Ordering Information

Device	Marking	Shipping
LRB551BS-30T5G	X	10000/Tape&Reel

**LRB551BS-30T5G**



### ● Absolute maximum ratings ( $T_a = 25^\circ C$ )

Parameter	Symbol	Limit	Unit
Repetitive Peak Reverse Voltage	VRRM	30	V
Non-Repetitive Peak Reverse Voltage	VRSM		V
Maximum DC Blocking Voltage	VR	30	V
Average Forward Rectified Current	IF(AV)	500	mA
Peak Forward Surge Current	IFSM	3	A
Storage and Operating Temperature Range	T <sub>j</sub> , T <sub>TSG</sub>	-65 to +150	degC

### ● Electrical characteristics ( $T_a = 25^\circ C$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_{F1}$	—	—	0.18	V	$I_F = 0.1mA$
	$V_{F2}$	—	—	0.2	V	$I_F = 1mA$
	$V_{F3}$	—	—	0.27	V	$I_F = 10mA$
	$V_{F4}$	—	—	0.36	V	$I_F = 100mA$
	$V_{F5}$	—	—	0.54	V	$I_F = 500mA$
Reverse current	$I_R$	—	—	100	uA	$V_R = 10V$
Reverse breakdown voltage	$V_{BR}$	30	—	—	V	$I_R = 500uA$

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●Electrical characteristic curves ( $T_a = 25^\circ\text{C}$ )

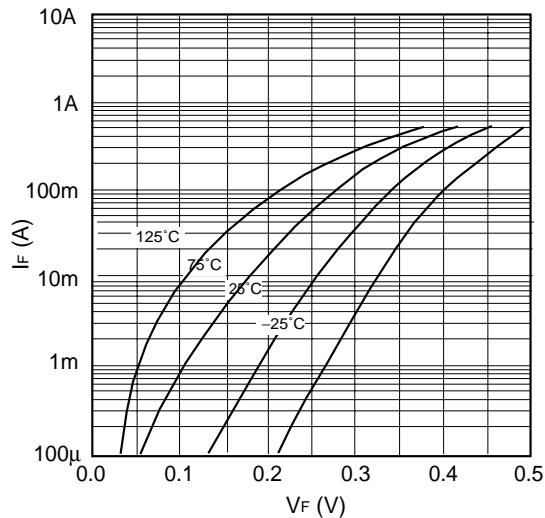


Fig.1 Forward current as a function of forward voltage(typical values)

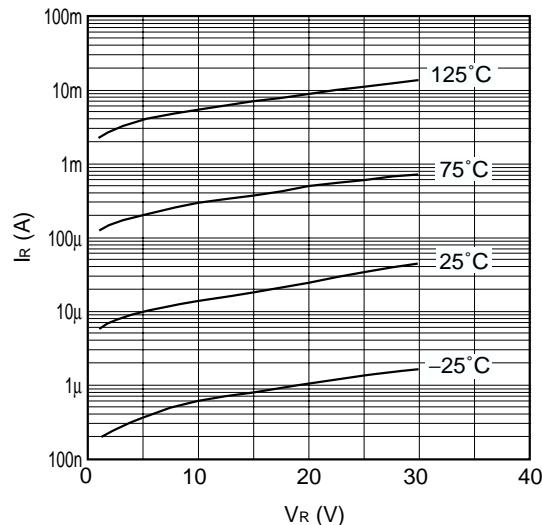


Fig.2 Reverse current as a function of reverse voltage(typical values)

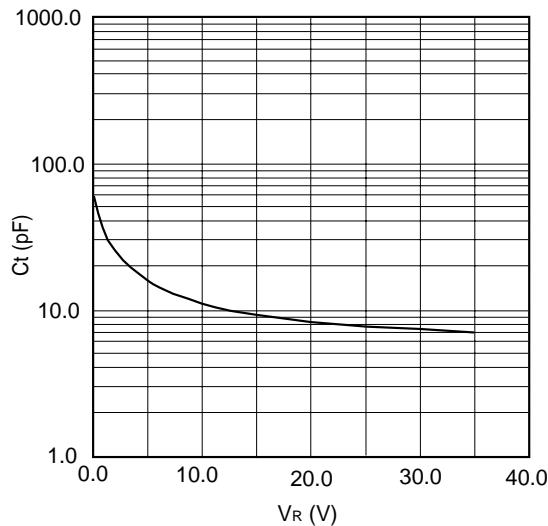


Fig.3 Diode capacitance as a function of reverse voltage(typical values)

**LRB551BS-30T5G****SOD882**

DIMENSION OUTLINE:

Unit:mm

