

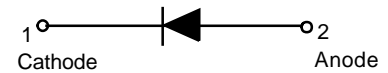
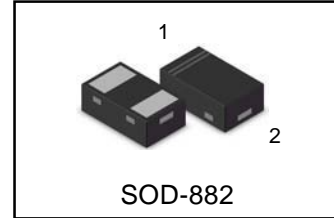
# Schottky barrier diode

● **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.



● **Construction**

Silicon epitaxial planar

● **Device Marking and Ordering Information**

Device	Marking	Shipping
FDR551UL2	X	10000/Tape&Reel

● **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	Tj, TSTG	-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	$\mu A$	$V_R = 10V$
Reverse breakdown voltage	$V_{BR}$	30	—	—	V	$I_R = 500\mu A$

● **Electrical characteristic curves (Ta = 25°C)**

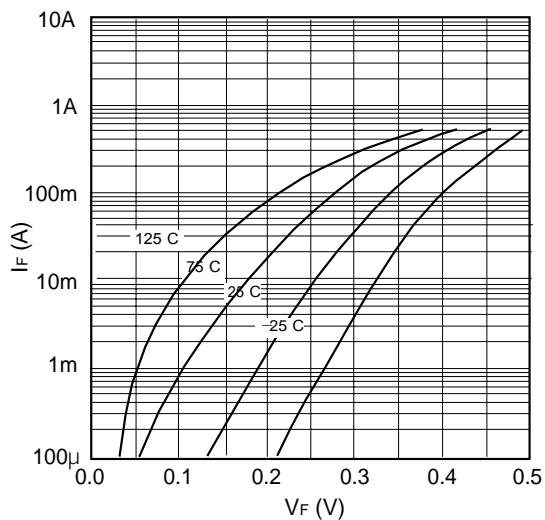


Fig.1 Forward current as a function of forward voltage (typical values)

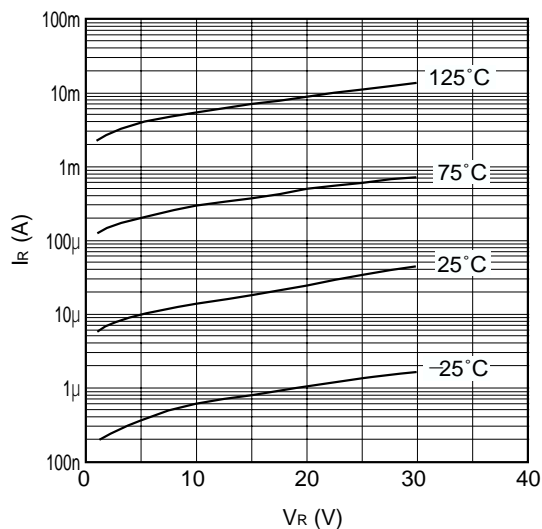


Fig.2 Reverse current as a function of reverse voltage (typical values)

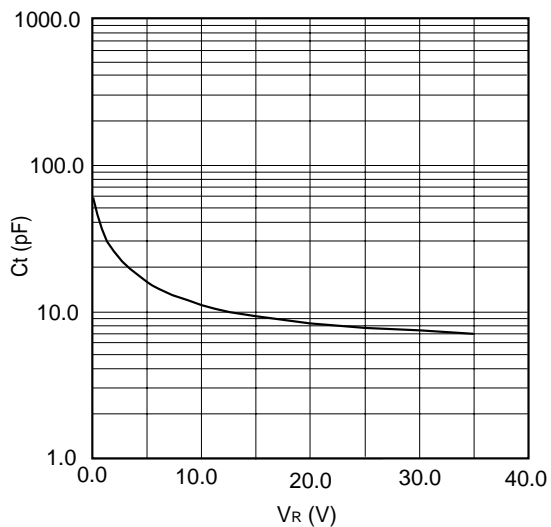


Fig.3 Diode capacitance as a function of reverse voltage (typical values)

## SOD-882

DIMENSION OUTLINE:

Unit:mm

