

Surface Mount Schottky Barrier Diodes

(Pb) Lead(Pb)-Free

Feature:

- * Small Surface Mounting Type.
- * Ultra Low V_F ($V_F = 0.45V$, Typ. at 0.5A)
- * High Reliability
- * We Declare That The Material of Product Compliance With RoHS Requirements
- * S-Prefix for Automotive and Other Applications Requiring Unique Site and Control Chang Requirements; AEC-Q101 Qualified and PPAP Capable.

**SMALL SIGNAL
SCHOTTKY DIODES
500m AMPERES
30 VOLTS**



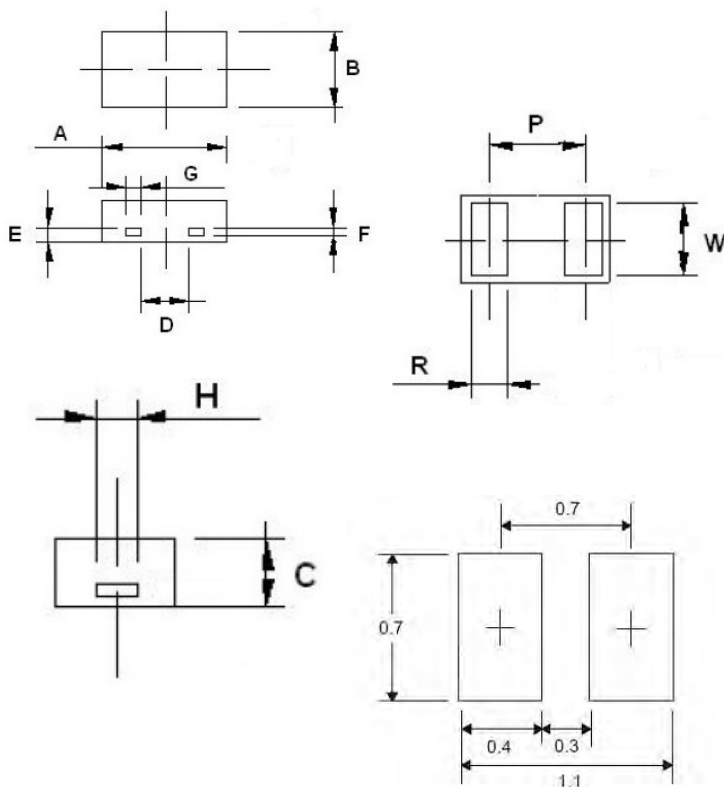
SOD-882

Applications:

- * High-Frequency Rectification Switching Regulators

SOD-882 Outline Dimensions

Unit:mm



SOLDERING FOOTPRINT

MILLIMETERS			
DIM	MIN	NOM	MAX
A	0.95	1.00	1.05
B	0.55	0.60	0.65
C	0.465	0.4825	0.5
D	0.39		
E	0.127		
F	0.0635		
G	0.12		
H	0.20		
P	0.64		
R	0.2	0.25	0.3
W	0.44	0.49	0.54


Maximum Ratings ($T_A=25^\circ\text{C}$ Unless otherwise noted)

Characteristic	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}		
Maximum DC Blocking Voltage	V_R		
Average Forward Rectified Current	$I_{F(AV)}$	500	mA
Peak Forward Surge Current	I_{FSM}	3	A
Storage Temperature Range	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$

Electrical Characteristics ($T_A=25^\circ\text{C}$ Unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
Forward Voltage $I_F=0.1\text{mA}$ $I_F=1.0\text{mA}$ $I_F=10\text{mA}$ $I_F=100\text{mA}$ $I_F=500\text{mA}$	V_F	-	-	0.18	V
		-	-	0.2	
		-	-	0.27	
		-	-	0.36	
		-	-	0.54	
Reverse Current $V_R=10\text{V}$	I_R	-	-	100	μA
Reverse Breakdown Voltage $I_R=500\mu\text{A}$	V_{BR}	30	-	-	V

Device Marking

Item	Marking	Equivalent Circuit diagram
WSD551BS	X	

Electrical Characteristic Curves ($T_A=25^\circ\text{C}$)

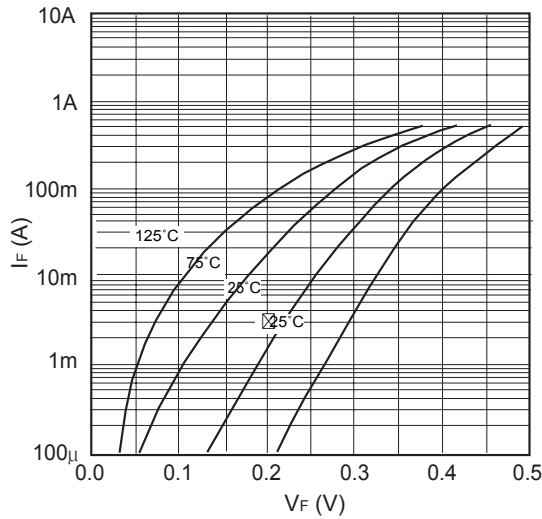


Fig.1 Forward current as a function of forward voltage(typical values)

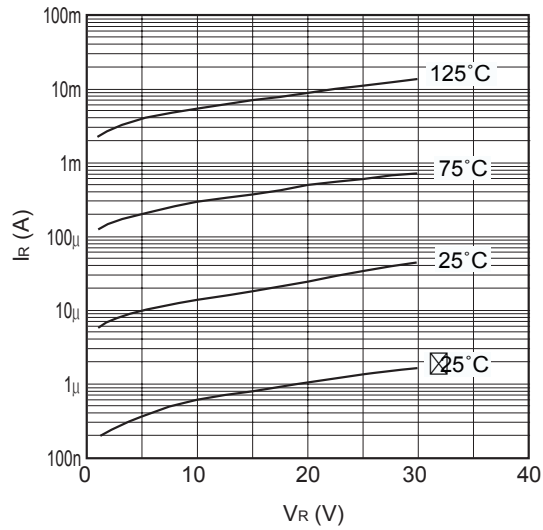


Fig.2 Reverse current as a function of reverse voltage(typical values)

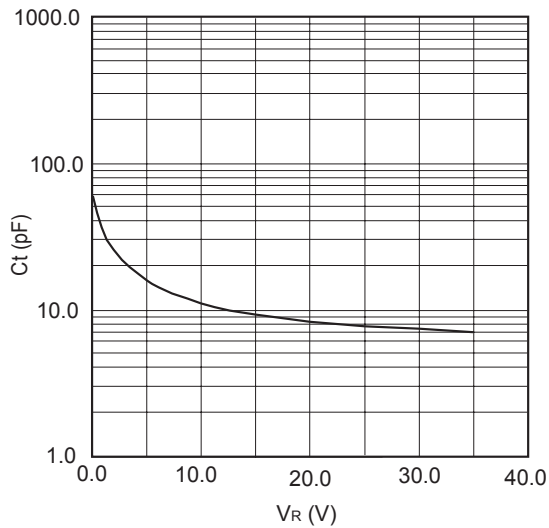


Fig.3 Diode capacitance as a function of reverse voltage(typical values)