



SSCS520S30L1

Schottky Barrier Diode

● Features

- ◇ Small surface mounting type
- ◇ Low reverse current and low forward voltage
- ◇ High reliability

● PIN configuration



DFN0603-2L (Bottom View)



Circuit Diagram

● Applications

- ◇ High speed switching for detection
- ◇ For portable equipment:(i.e. Mobile phone, MP3, MD, CD-ROM, DVD-ROM, Note book PC, etc.)



Marking (Top View)

● Absolute maximum rating @T_A=25°C

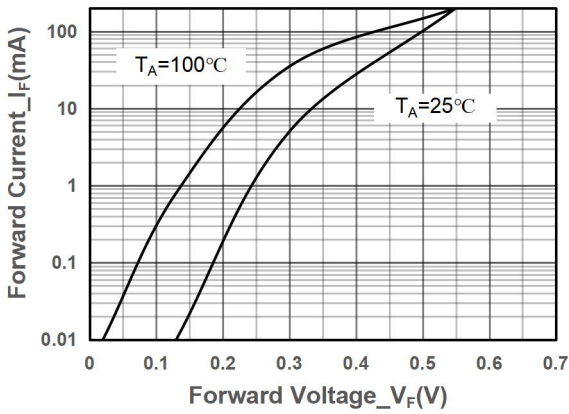
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	30	V
Reverse Voltage (RMS)	V _{R(RMS)}	24	
Average Rectified Forward Current	I _O	100	mA
Non-Repetitive Peak Forward Surge Current@ t=8.3ms	I _{FSM}	500	mA
Power Dissipation	P _D	100	mW
Thermal Resistance Junction to Ambient (Typ)	R _{θJA}	150	°C/W
Operating Temperature	T _J	-55 ~ +125	°C
Storage Temperature	T _{STG}	-55 ~ +150	°C

● Electrical Characteristics @T_A=25°C

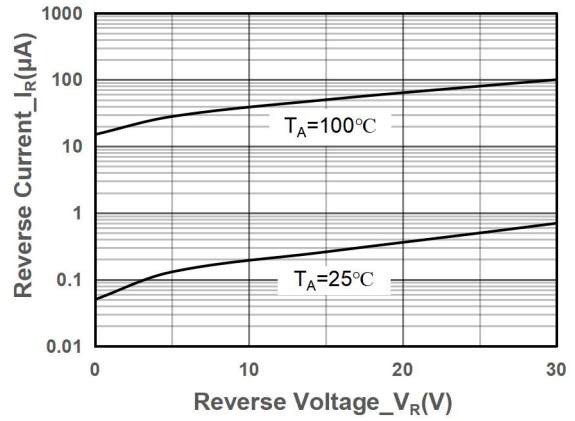
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	V _R	I _R = 50μA	30			V
Forward Voltage	V _F	I _F = 10mA		0.32	0.37	V
		I _F = 100mA		0.46	0.7	
Reverse Current	I _R	V _R = 10V		0.3		μA
		V _R = 30V		0.5	10	
Total Capacitance	C _T	V _R = 0V, f = 1MHz		12		pF



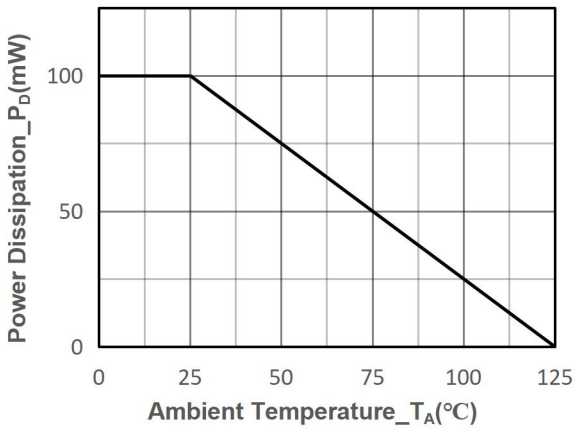
● Typical Performance Characteristics



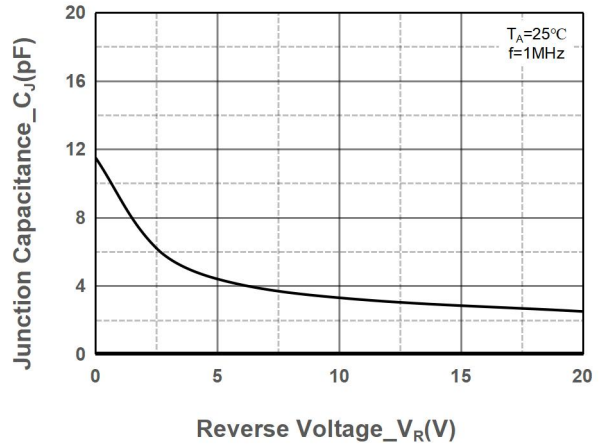
Forward Voltage vs. Forward Current



Reverse Voltage vs. Reverse Current



Power Derating vs. Ambient Temperature



Junction Capacitance vs. Reverse Voltage



● Package Information

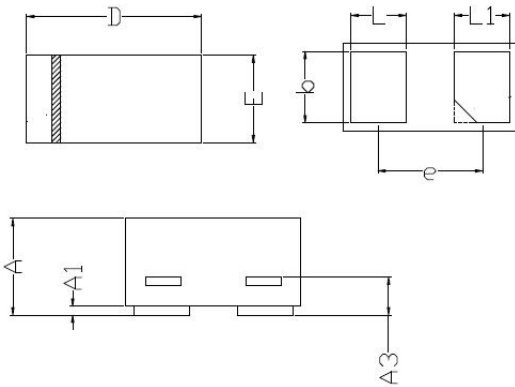
Ordering Information

Device	Package	Marking	Qty per Reel	Reel Size
SSCS520S30L1	DFN0603-2L	F	15000	7 Inch

Mechanical Data

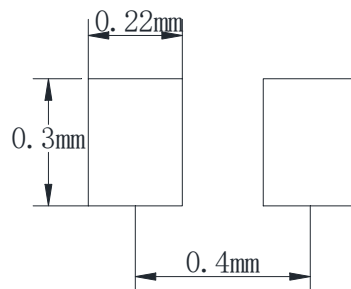
Case: DFN0603-2L

Case Material: Molded Plastic. UL Flammability



DIM	Millimeters	
	Min	Max
A	0.230	0.330
A1	0.000	0.050
A3	0.102REF	
D	0.550	0.650
E	0.250	0.350
b	0.215	0.275
L	0.12	0.23
L1	0.12	0.23
e	0.40BSC	

Recommended Pad outline





DISCLAIMER

SSCSEMI RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. SSCSEMI DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICIENCE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

THE GRAPHS PROVIDED IN THIS DOCUMENT ARE STATISTICAL SUMMARIES BASED ON A LIMITED NUMBER OF SAMPLES AND ARE PROVIDED FOR INFORMATIONAL PURPOSE ONLY. THE PERFORMANCE CHARACTERISTICS LISTED IN THEM ARE NOT TESTED OR GUARANTEED. IN SOME GRAPHS, THE DATA PRESENTED MAY BE OUTSIDE THE SPECIFIED OPERATING RANGE (E.G. OUTSIDE SPECIFIED POWER SUPPLY RANGE) AND THEREFORE OUTSIDE THE WARRANTED RANGE.

OUR PRODUCT SPECIFICATIONS ARE ONLY VALID IF OBTAINED THROUGH THE COMPANY'S OFFICIAL WEBSITE, CRM SYSTEM, OR OUR SALES PERSONNEL CHANNELS. IF CHANGES OR SPECIAL VERSIONS ARE INVOLVED, THEY MUST BE STAMPED WITH A QUALITY SEAL AND MARKED WITH A SPECIAL VERSION NUMBER TO BE VALID.