SSC8211GN2

P-Channel Enhancement Mode MOSFET

➢ Features

V_{DS}	V_{GS}	$R_{DS(ON)}$	I_D
-16V	±12V	11mΩ@-4V5	-12A
		18mΩ@-2V5	

➢ Description

This device is produced with high cell density DMOS trench technology, uses advanced trench technology and design to provide excellent RDSON with low gate charge. This device particularly suits low voltage applications such as portable equipment, power management and other battery powered circuits, and low in-line power dissipation are needed in a very small outline surface mount package.

➢ Applications

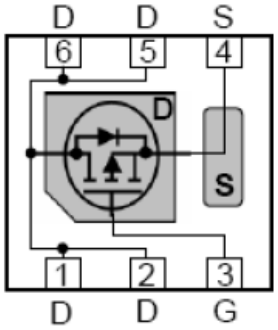
- Load Switch
- Portable Devices
- DCDC Conversion
- Charging
- Driver for Relay

➢ Ordering Information

Device	Package	Shipping
SSC8211GN2	DFN2X2-6L	3000/Reel

➢ Pin configuration

DFN2X2-6L (Bottom View)



Pin Configuration (Top View)

Marking

➢ Absolute Maximum Ratings (T_A=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-to-Source Voltage	V_{DSS}	-16	V
Gate-to-Source Voltage	V_{GSS}	±12	V
Continuous Drain Current [a]	I_D	-12	A
Pulsed Drain Current [b]	I_{DM}	-48	A
Power Dissipation [a]	P_D	-2.1	W
Operation junction temperature, Storage temperature range	T_J, T_{STG}	-55 to 150	℃

➢ Thermal Resistance Ratings (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Ratings	Unit
$R_{\theta JA}$	Junction-to-Ambient Thermal Resistance [a]	59	℃/W

Note:

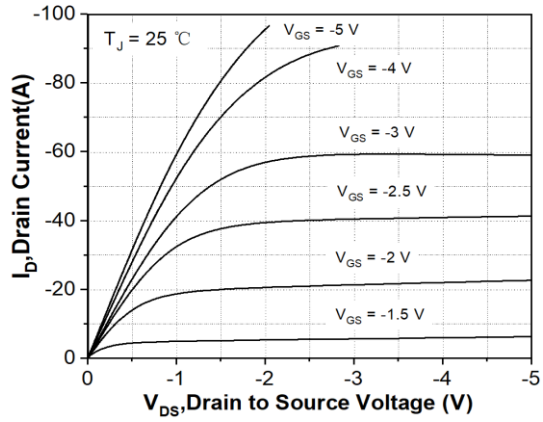
a. The value of $R_{\theta JA}$ is measured with the device mounted on 1 in^2 FR-4 board with 2oz.copper,in a still air environment with T_A=25℃.The value in any given application depends on the user is specific board design. The current rating is based on the t≤10s thermal resistance rating.

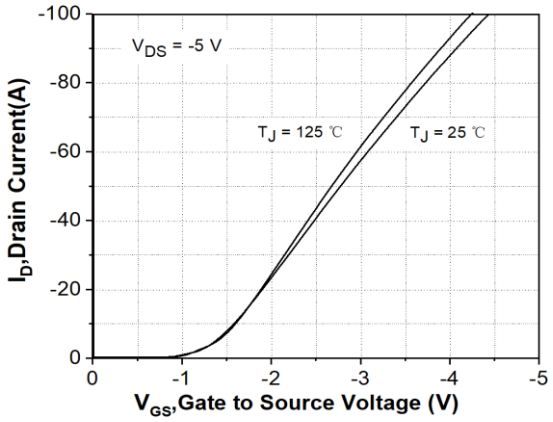
b. Repetitive rating, pulse width limited by junction temperature.

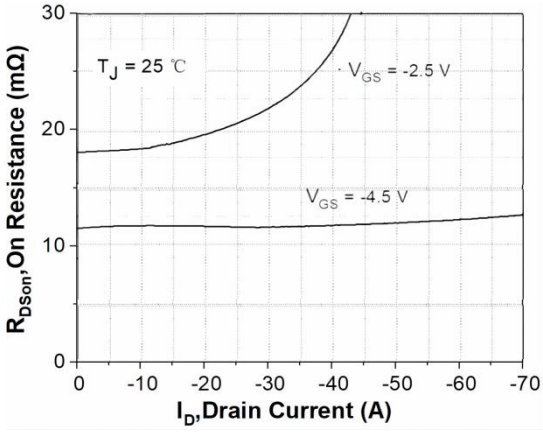
➢ Electrical Characteristics (T_A=25℃ unless otherwise noted)

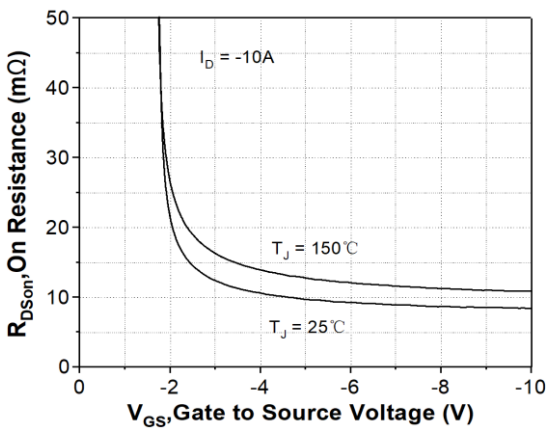
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	V_{GS} = 0V, I_D = -250μA	-16			V
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS} = V_{GS}, I_D = -250uA	-0.4	-0.75	-1	V
Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS} = -4.5V, I_D = -7A		11	18	mΩ
		V_{GS} = -2.5V, I_D = -6A		18	26	
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS} = -12V, V_{GS} = 0V			-1	μA
Gate-Source Leak Current	I_{GSS}	V_{GS} = ±12V, V_{DS} = 0V			±100	nA
Transconductance	G_{FS}	V_{DS} = -5V, I_D = -10A		28		s
Forward Voltage	V_{SD}	V_{GS} = 0V, I_S = -1A		-0.75	-1.3	V
Input Capacitance	C_{ISS}	V_{DS} = -8V, V_{GS} = 0V, f = 1MHz		1745		pF
Output Capacitance	C_{OSS}			480		
Reverse Transfer Capacitance	C_{RSS}			440		
Turn-on Delay Time	$T_{D(ON)}$	V_{GS} = -4.5V, V_{DS} = -8V, R_L = 3Ω, R_G = 1Ω, I_D = -6A		13.5		ns
Rise Time	T_r			45		
Turn-off Delay Time	$T_{D(OFF)}$			75		
Fall Time	T_f			24.5		

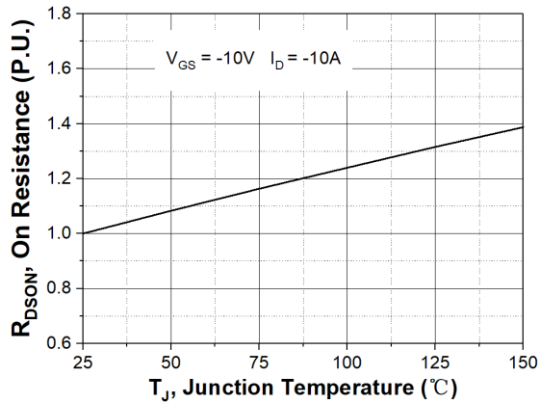
➢ Typical Performance Characteristics (T_A=25℃ unless otherwise noted)

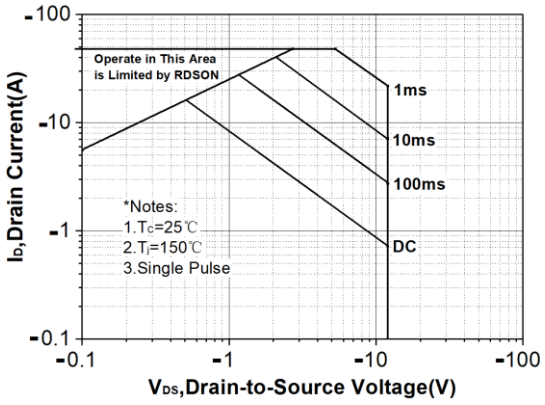


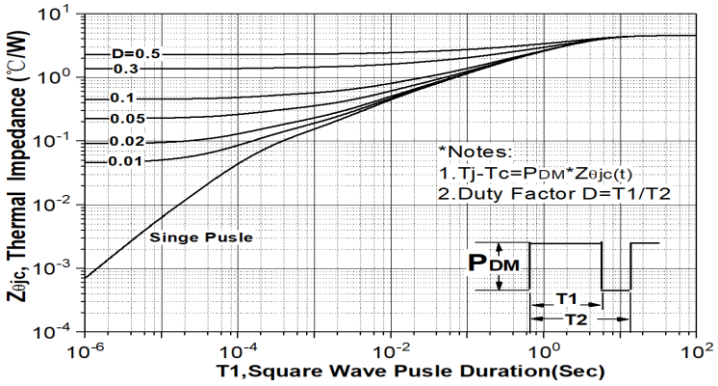




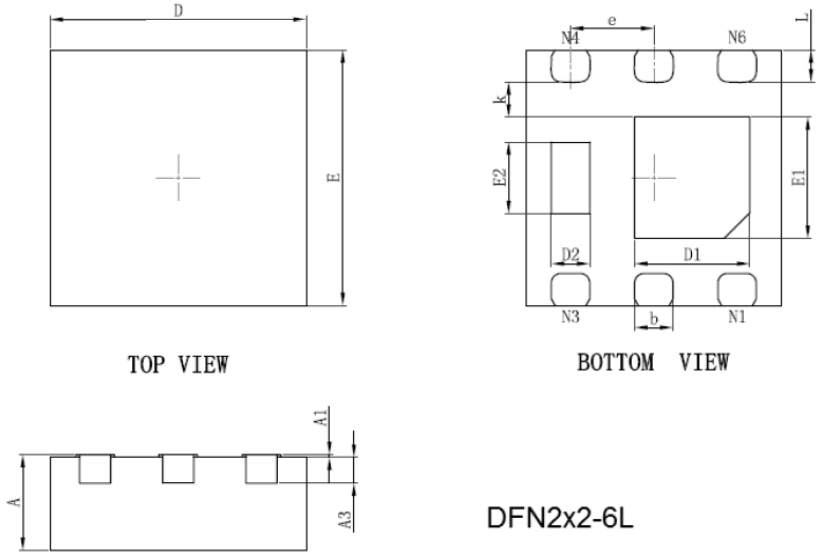








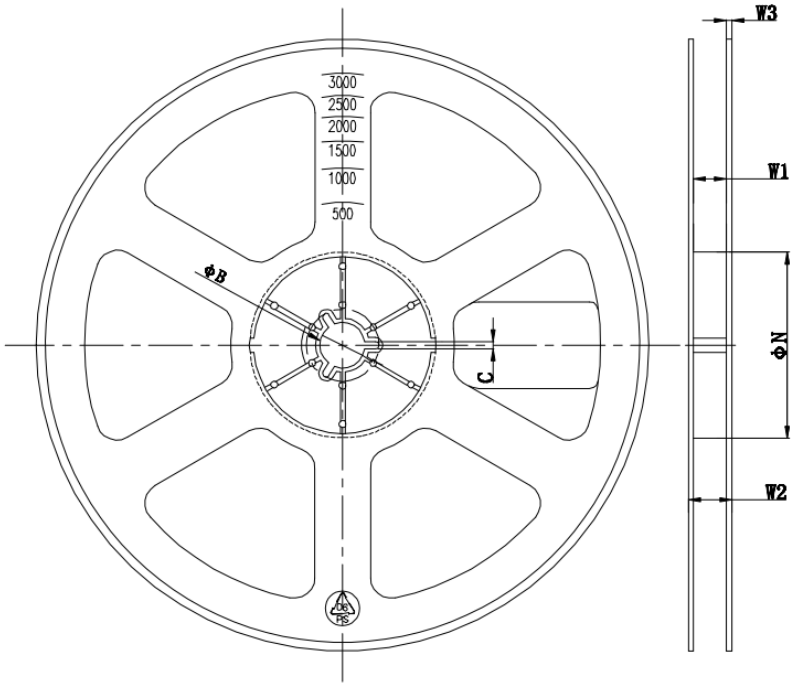
➢ Package Information



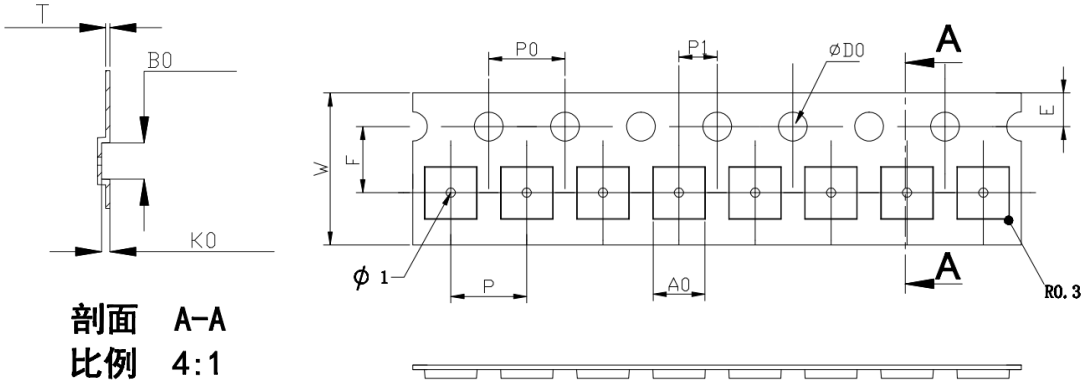
DFN2x2-6L

Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.700	0.800
A1	0.000	0.050
A3	0.203REF.	
D	1.924	2.076
E	1.924	2.076
D1	0.800	1.000
E1	0.850	1.050
D2	0.200	0.400
E2	0.460	0.660
k	0.200MIN.	
b	0.250	0.350
e	0.650TYP.	
L	0.174	0.326

➢ Tape and Reel



ΦA	ΦN	ΦB	C	W1	W2	W3
178±2	54±2	13.2±0.2	2.2±0.3	9.5±1	13max	1.4±0.4



剖面 A-A
比例 4:1

A0	B0	K0	P	P0	E	F	D0	P1	T	W
2.25±0.05	2.25±0.05	1.15 ±0.05	4.00 ±0.05	4.00 ±0.05	1.75 ±0.10	3.50±0.05	1.55 ±0.10	2.00 ±0.05	0.25±0.05	7.95±0.05

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