

**SSC8232GN6**
**N-Channel Enhancement Mode MOSFET**
**➤ Features**

VDS	VGS	RDSON Typ.	ID
30V	±20V	7.4mR@10V	60A
		10.5mR@4V5	

**➤ Description**

This device uses advanced trench technology to provide excellent RDSON and low gate charge. This device is suitable for use as a load switch or in PWM applications.

**➤ Applications**

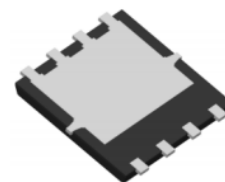
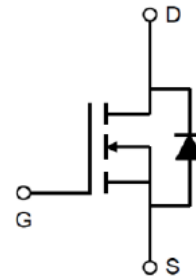
- Load Switch
- Portable Devices
- DCDC conversion

**➤ Ordering Information**

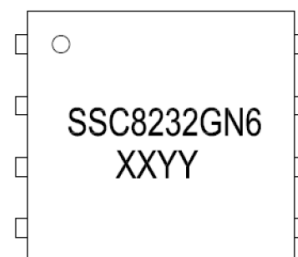
Device	Package	Shipping
SSC8232GN6	DFN5x6	5000/Reel

**➤ Pin configuration**

Top view



Bottom View



(XX: year/YY: week)

Marking

➤ **Absolute Maximum Ratings**( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

Symbol	Parameter	Ratings	Unit
$V_{DSS}$	Drain-to-Source Voltage	30	V
$V_{GSS}$	Gate-to-Source Voltage	$\pm 20$	V
$I_D$	Continuous Drain Current	60	A
$I_{DM}$	Pulsed Drain Current	105	A
$P_D$	Power Dissipation	49	W
$T_J$	Operation junction temperature	-55 to 150	$^{\circ}\text{C}$
$T_{STG}$	Storage temperature range	-55 to 150	$^{\circ}\text{C}$

➤ **Thermal Resistance Ratings**( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

Symbol	Parameter	Typical	Maximum	Unit
$R_{\theta JA}$	Junction-to-Ambient Thermal Resistance		30	$^{\circ}\text{C}/\text{W}$
$R_{\theta JC}$	Junction-to-Case Thermal Resistance		12	

➤ **Electronics Characteristics**( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

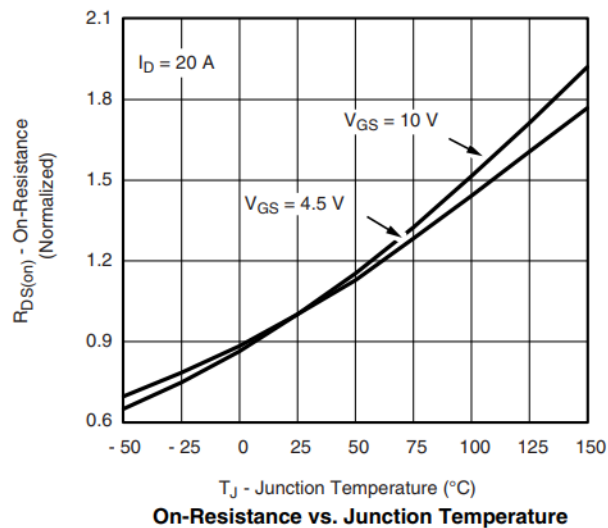
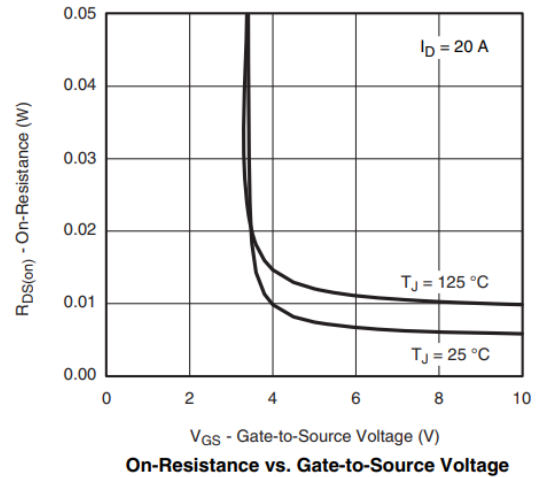
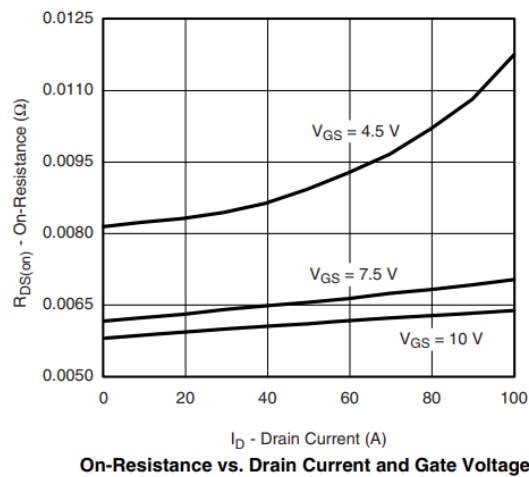
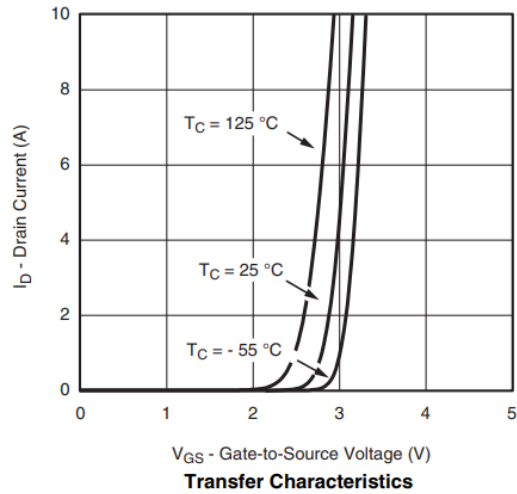
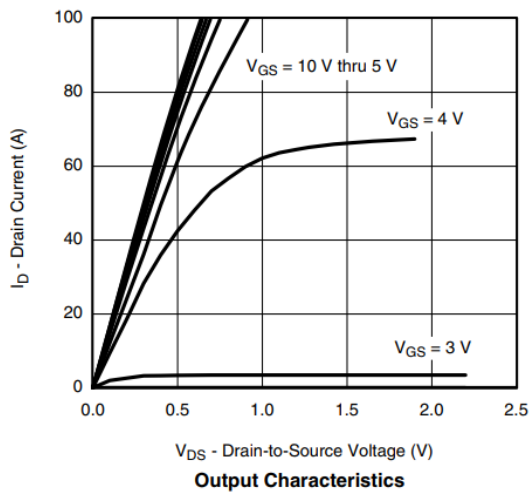
Symbol	Parameter	Test Conditions	Min	Typ.	Max	Unit
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0V, I_D=250\mu\text{A}$	30			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}, I_D=250\mu\text{A}$	1.2	1.8	2.8	V
$R_{DS(on)}$	Drain-Source On- Resistance	$V_{GS}=10V, I_D=24A$		7.4	8.5	mR
		$V_{GS}=4.5V, I_D=20A$		10.5	12.5	

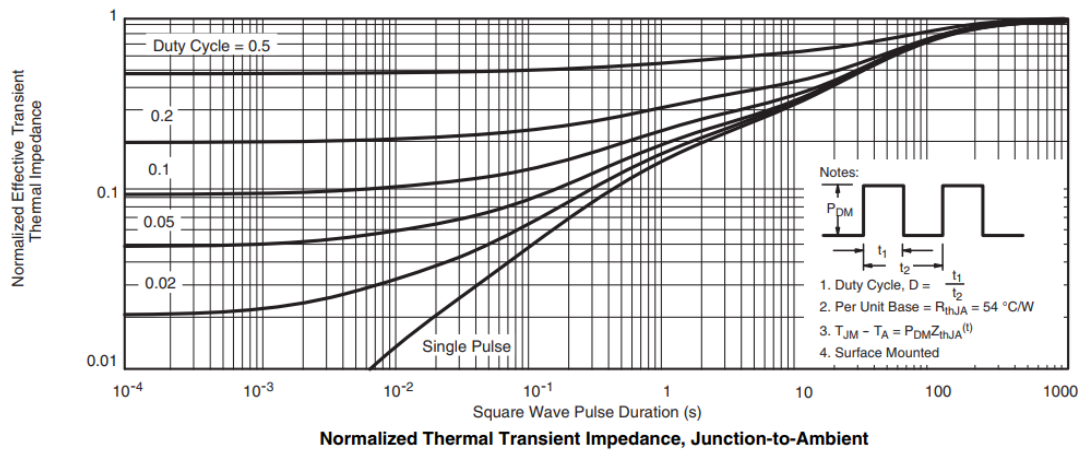
**SSC8232GN6**

Symbol	Parameter	Test Conditions	Min	Typ.	Max	Unit
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}=30V, V_{GS}=0V$			1	$\mu A$
$I_{GSS}$	Gate-Source leak current	$V_{GS}=\pm 20V, V_{DS}=0V$			$\pm 100$	nA
$G_{FS}$	Forward Transconductance	$V_{DS}=5V, I_D=5A$		25		S
$V_{SD}$	Forward Voltage	$V_{GS}=0V, I_S=1A$			1	V

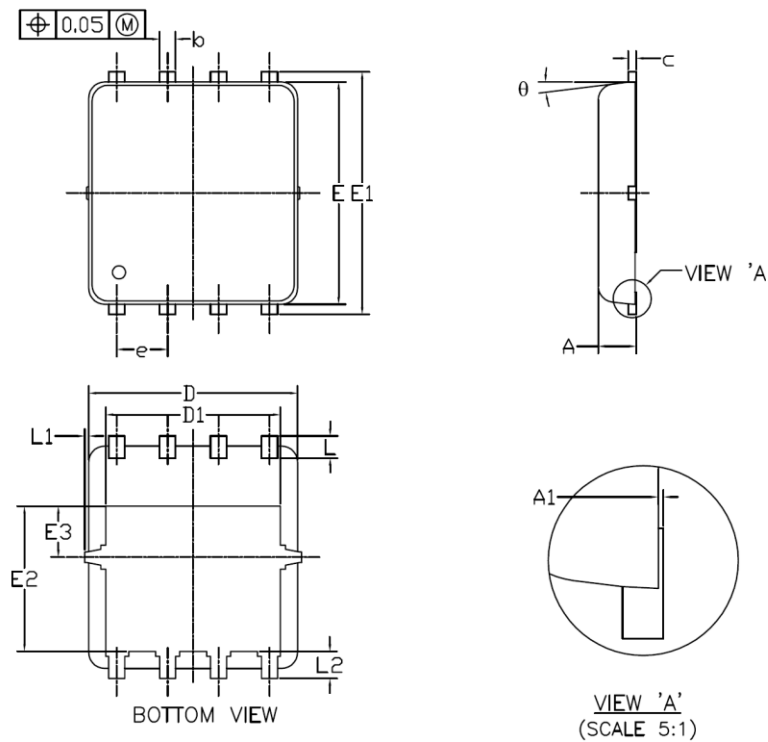
Symbol	Parameter	Test Conditions	Min	Typ.	Max	Unit
$C_{iss}$	Input Capacitance	$V_{DS}=15V, V_{GS}=0V,$ $F=1MHz$		1115		pF
$C_{oss}$	Output Capacitance			169		
$C_{rss}$	Reverse Transfer Capacitance			99		
$T_{D(ON)}$	Turn-on delay time	$V_{GEN}=10V,$ $V_{DS}=15V, R_L=15R,$ $R_G=3R, I_D=1A$			6	ns
$T_{D(OFF)}$	Turn-off delay time				22	

➤ **Typical Characteristics** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)





### ➤ Package Information



Package : DNF5X6-8L

SYMBOLS	DIMENSIONS IN MILLIMETERS		
	MIN	NOM	MAX
A	0.85	0.95	1.00
A1	0.00	---	0.05
b	0.30	0.40	0.50
c	0.15	0.20	0.25
D	5.10	5.20	5.30
D1	4.25	4.35	4.45
E	5.45	5.55	5.65
E1	5.95	6.05	6.15
E2	3.525	3.625	3.725
E3	1.175	1.275	1.375
e	1.27 BSC		
L	0.45	0.55	0.65
L1	0	---	0.15
L2	0.68 REF		
θ	0°	---	10°



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