

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

DESCRIPTION

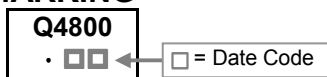
The SSG4800J-C uses advanced trench technology to provide excellent $R_{DS(ON)}$ and low gate charge.

This device is suitable for use as a load switch or in PWM applications.

FEATURES

- Simple Drive Requirement
- Low Gate Charge
- Green Device Available

MARKING



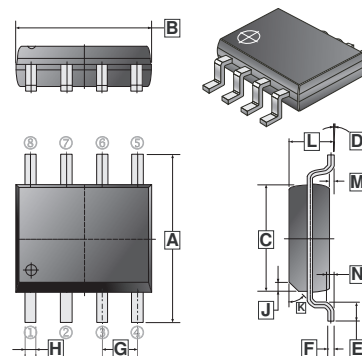
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOP-8	4K	13 inch

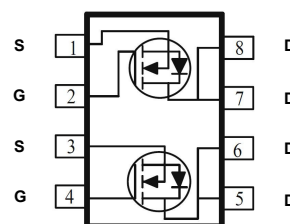
ORDER INFORMATION

Part Number	Type
SSG4800J-C	Lead (Pb)-free and Halogen-free

SOP-8



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	5.79	6.20	H	0.33	0.51
B	4.70	5.11	J	0.375	REF.
C	3.80	4.00	K	45°	REF.
D	0°	8°	L	1.3	1.752
E	0.40	1.27	M	0	0.25
F	0.10	0.25	N	0.25	REF.
G	1.27 TYP.				



ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Drain-Source Voltage	V_{DS}	30	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current ¹ ($t \leq 10\text{s}$)	I_D	6.9	A
Pulsed Drain Current ²	I_{DM}	28	A
Total Power Dissipation	P_D	1.25	W
Junction and Storage Temperature Range	T_J, T_{STG}	150, -55~150	$^{\circ}\text{C}$
Thermal Resistance Ratings			
Thermal Resistance Junction-Ambient ¹ ($t \leq 10\text{s}$)	$R_{\theta JA}$	100	$^{\circ}\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

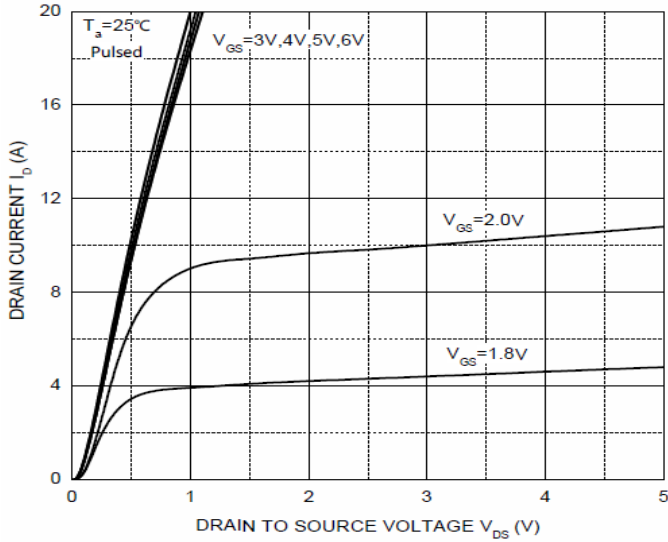
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Drain-Source Breakdown Voltage	BV_{DSS}	30	-	-	V	$V_{GS}=0V, I_D=250\mu A$
Gate Threshold Voltage	$V_{GS(th)}$	0.7	1	1.4	V	$V_{DS}=V_{GS}, I_D=250\mu A$
Forward Transfer Conductance ³	g_{fs}	-	8	-	S	$V_{DS}=5V, I_D=5A$
Gate-Source Leakage Current	I_{GSS}	-	-	± 100	nA	$V_{GS}=\pm 20V, V_{DS}=0V$
Drain-Source Leakage Current	I_{DSS}	-	-	1	μA	$V_{DS}=24V, V_{GS}=0V$
Static Drain-Source On-Resistance ³	$R_{DS(ON)}$	-	16	22	m Ω	$V_{GS}=10V, I_D=6.9A$
		-	19	27		$V_{GS}=4.5V, I_D=6A$
Turn-on Delay Time	$T_{d(on)}$	-	5	-	nS	$V_{DS}=15V$ $V_{GS}=10V$ $R_L=1.8\Omega$ $R_G=3\Omega$
Rise Time	T_r	-	7	-		
Turn-off Delay Time	$T_{d(off)}$	-	40	-		
Fall Time	T_f	-	6	-		
Input Capacitance	C_{iss}	-	879	-	pF	$V_{GS}=0V$ $V_{DS}=15V$ $f=1MHz$
Output Capacitance	C_{oss}	-	93	-		
Reverse Transfer Capacitance	C_{riss}	-	82	-		
Source-Drain Diode						
Diode Forward Voltage ³	V_{SD}	-	-	1	V	$V_{GS}=0V, I_S=1A$

Notes:

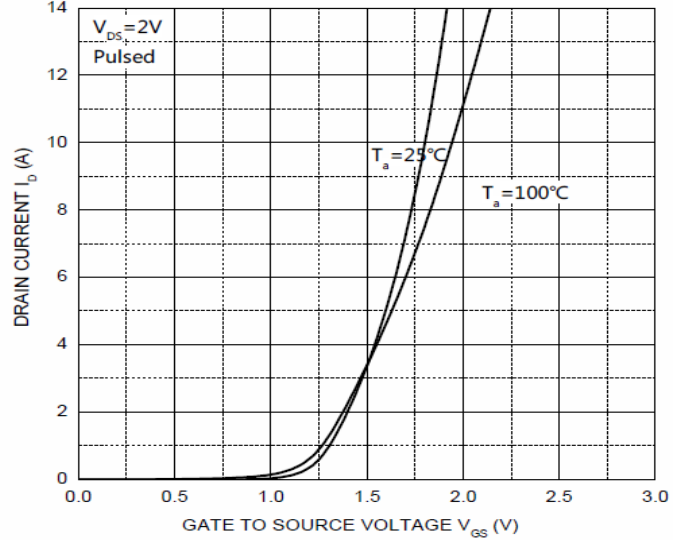
- Surface mounted on a 1 inch² FR-4 board with 2OZ copper.
- Pulse width limited by maximum junction temperature.
- The data tested by pulsed, pulse width $\leq 300\mu s$, duty cycle $\leq 2\%$.

CHARACTERISTICS CURVE

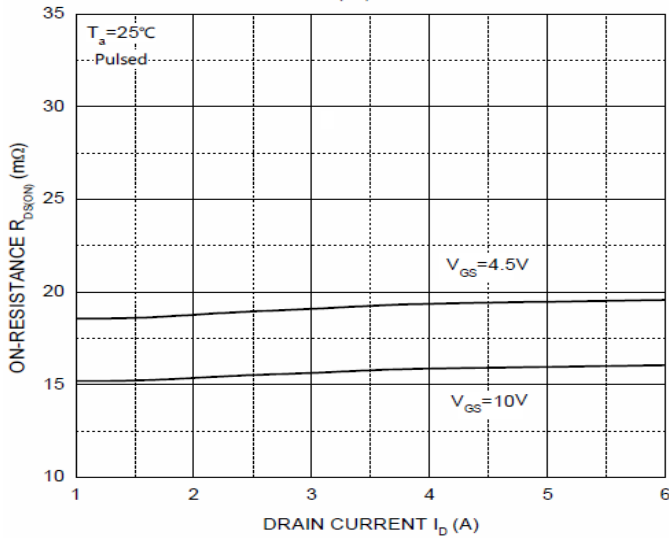
Output Characteristics



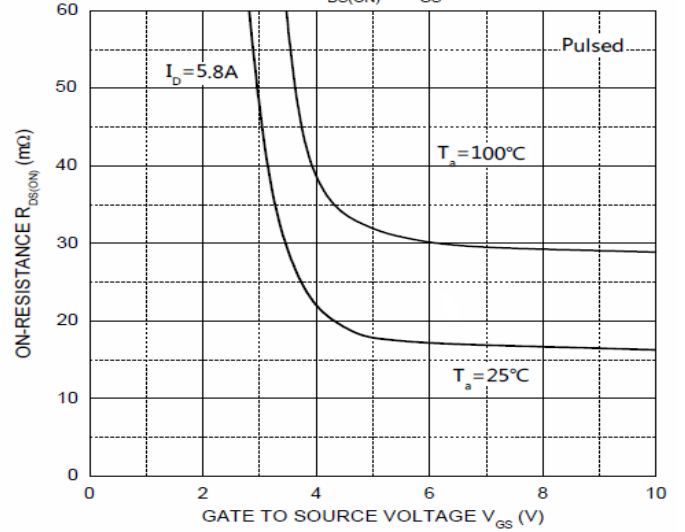
Transfer Characteristics



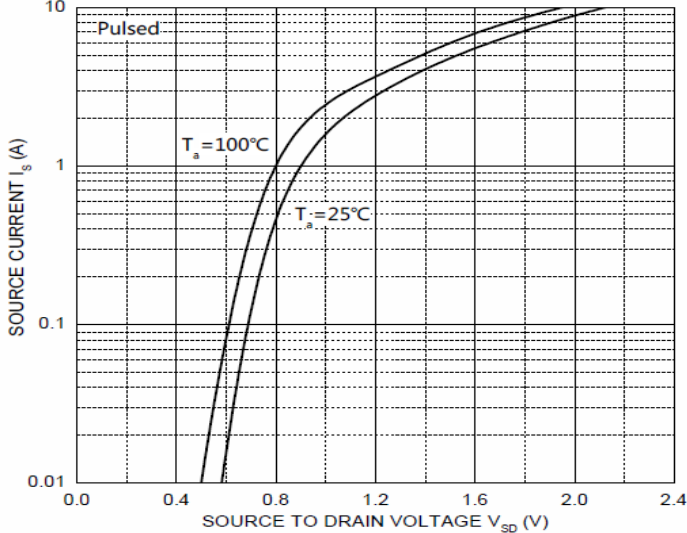
$R_{DS(ON)} - I_D$



$R_{DS(ON)} - V_{GS}$



$I_S - V_{SD}$



Threshold Voltage

