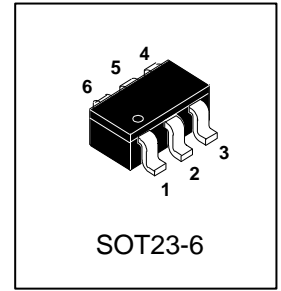


N2908

N-Channel Logic Level Enhancement Mode MOSFET

1. FEATURES

- Low RDS(on) trench technology.
- Low thermal impedance.
- Fast switching speed.
- We declare that the material of product compliance with RoHS requirements and Halogen Free.

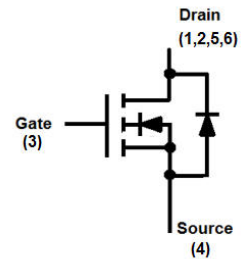


2. APPLICATIONS

- DC-DC Conversion

3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
N2908	SN3	3000/Tape&Reel



4. MAXIMUM RATINGS(Ta = 25°C)

Parameter		Symbol	Limits	Unit
Drain-to-Source Voltage		VDS	100	V
Gate-to-Source Voltage		VGS	±20	V
Continuous Drain Current	TC=25°C	ID	5	A
	TC=100°C		3	A
Pulsed Drain Current(Note 1)		IDM	20	A
Power Dissipation	TC=25°C	PD	3	W
	TC=100°C		1	
Operating Junction and Storage Temperature Range		Tj/Tstg	-55~+150	°C

1.Pluse width limited by maximum junction temperature.

5. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Thermal Resistance,Junction-to-Ambient (Note 2)	RθJA	105	°C/W
Thermal Resistance,Junction-to-Case (Note 2)	RθJC	30	°C/W

2.Surface mounted on "1.5 x 1.5" FR4 board using 1 sq in pad, 2 oz Cu.



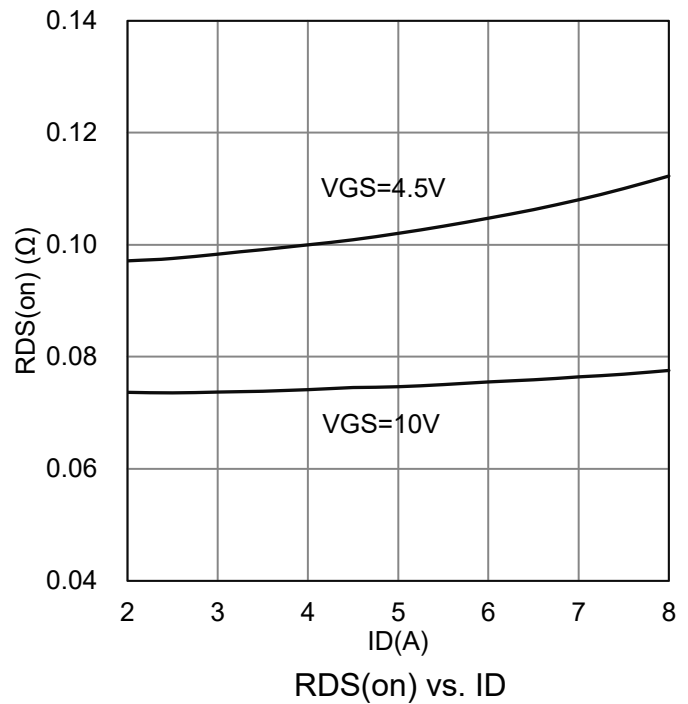
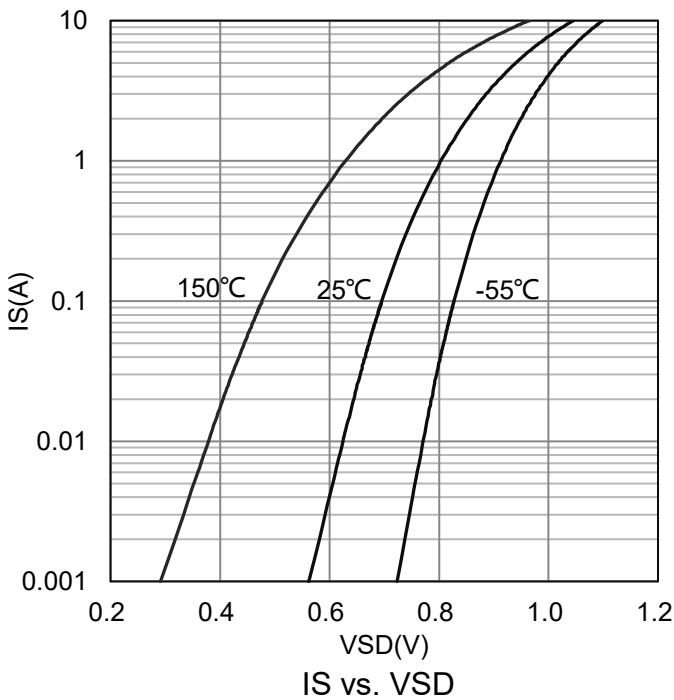
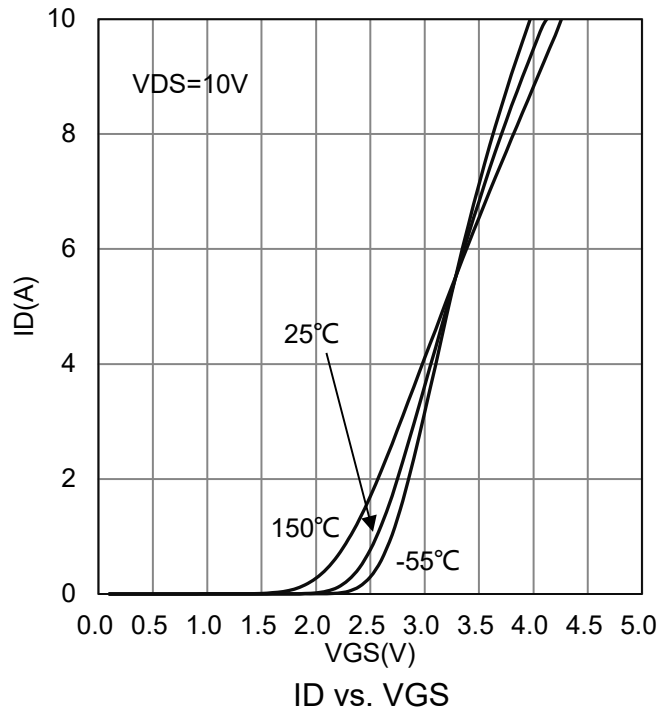
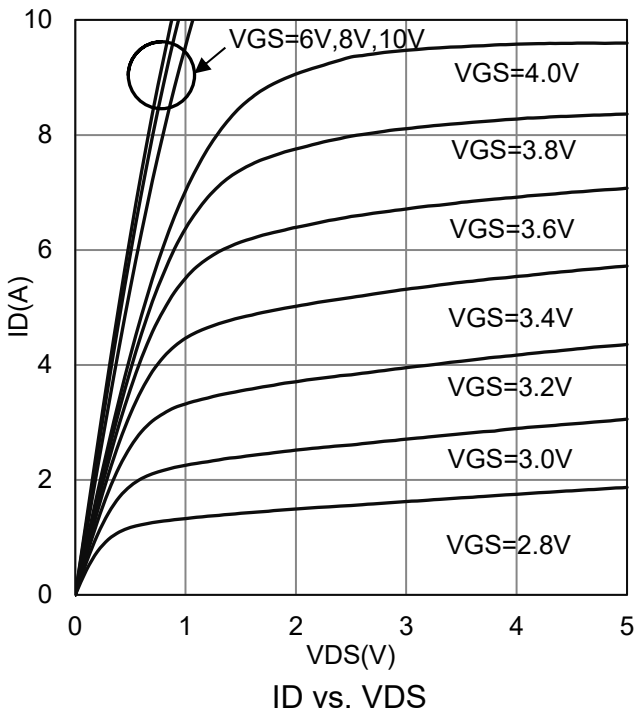
6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Static					
Drain to Source Breakdown Voltage (VGS =0V, ID =250μA)	VDSS	100	-	-	V
Zero Gate Voltage Source Current (VDS =80V, VGS =0V)	IDSS	-	-	1	uA
Gate to Source Leakage Current (VDS =0V, VGS = ±20V)	IGSS	-	-	±100	nA
Gate Threshold Voltage (VDS = VGS , ID = 250μA)	VGS(th)	1	1.8	3	V
Drain-to-Source On-Resistance(Note 3) (VGS=10V, ID=5A) (VGS=4.5V, ID=3A)	RDS(ON)	- -	- -	120 170	mΩ
Dynamic					
Input Capacitance	(VGS = 0V ,VDS = 50V, f = 1MHz)	Ciss	-	202	pF
Output Capacitance		Coss	-	33.4	
Reverse Transfer Capacitance		Crss	-	1.9	
Turn-on Delay Time	(VDD=50V,VGS =10V, RG = 6.8 Ω, ID= 4 A)	td(on)	-	4.6	nS
Rise Time		tr	-	4.3	
Turn-Off Delay Time		td(off)	-	12.9	
Fall Time		tf	-	1.7	
Total Gate Charge	(VDS=50V,VGS =10V, ID=4A)	Qg	-	5.3	nC
Gate to Source Charge		Qgs	-	0.9	
Gate to Drain Charge		Qgd	-	2	
Gate Resistance	Rg	-	2.4	-	Ω
Diode Forward Voltage(Note 3) (IF = 1 A, VGS = 0 V)	VSD	-	-	1.3	V

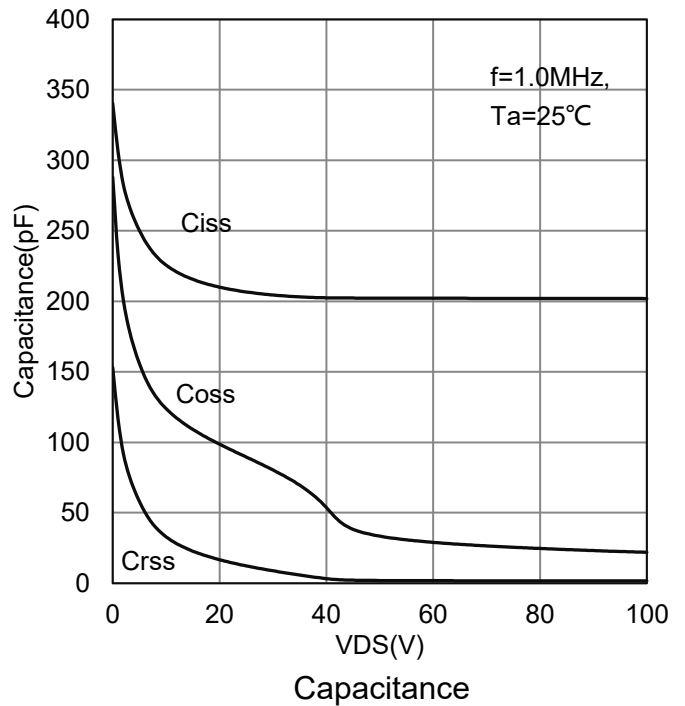
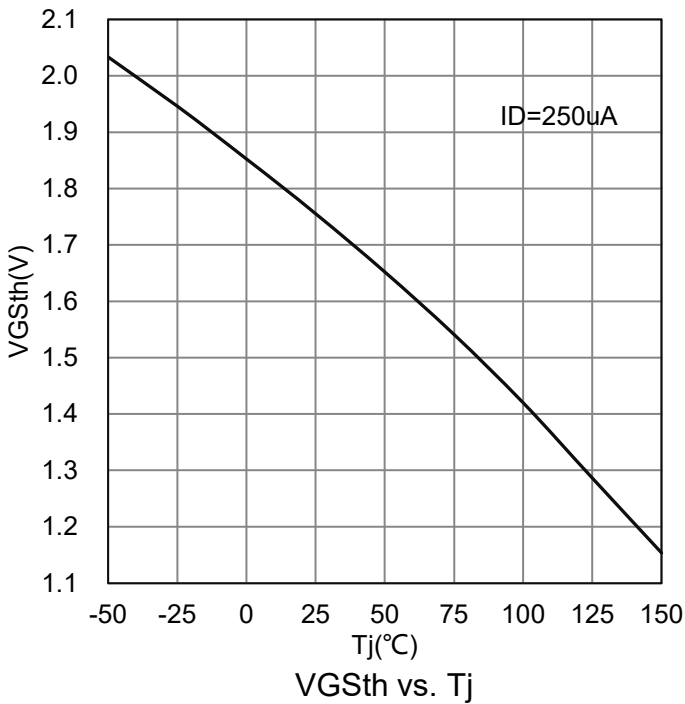
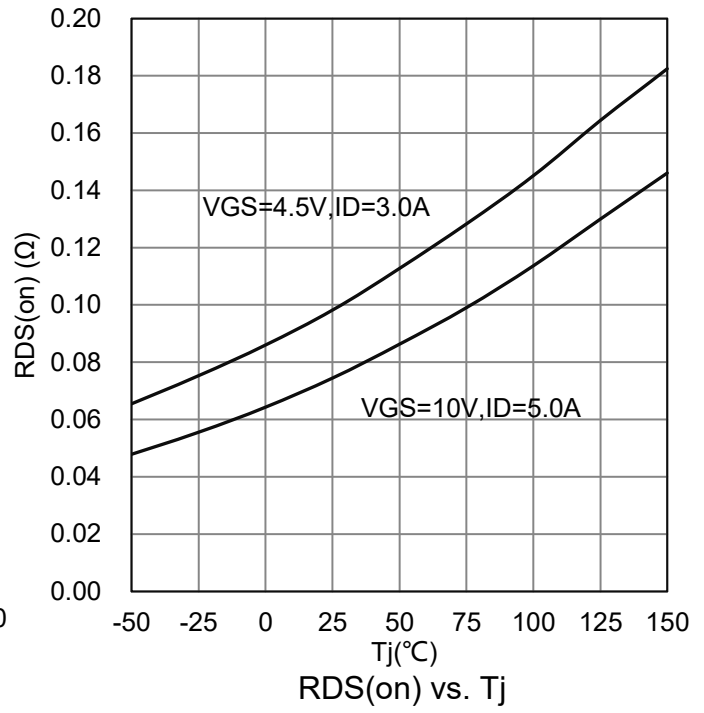
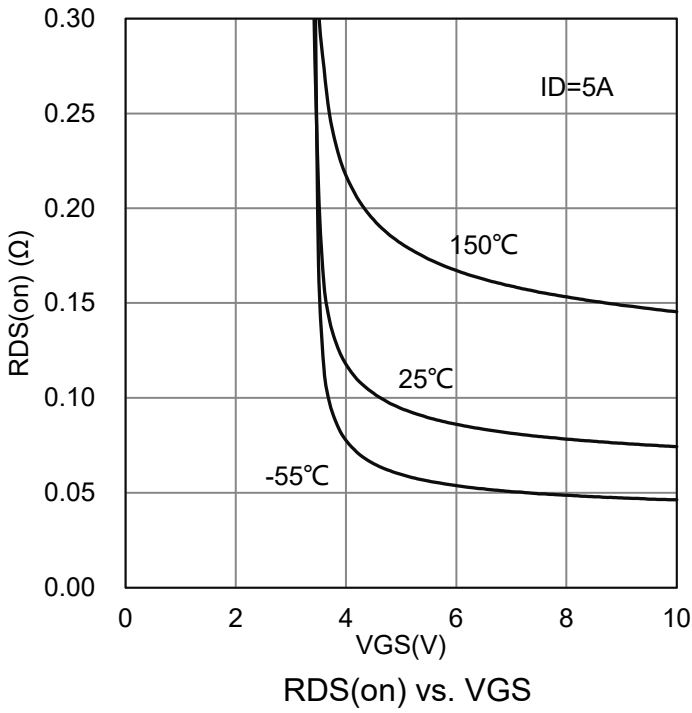
3.Pulse test : Pulse Width ≤300 μs, Duty Cycle ≤2%.

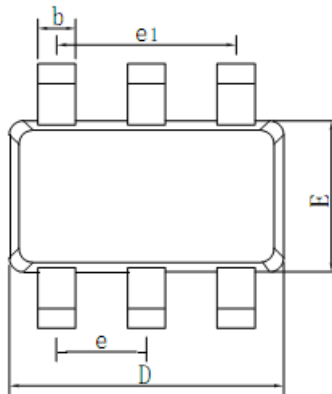
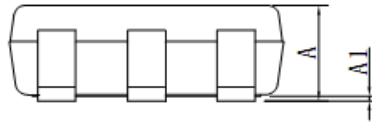
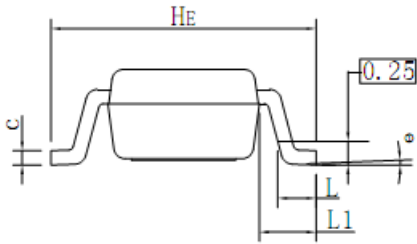


7. ELECTRICAL CHARACTERISTICS CURVES

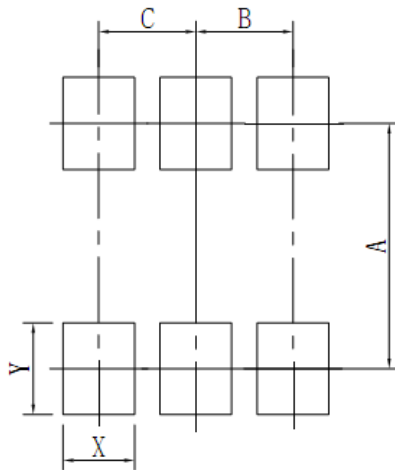


7. ELECTRICAL CHARACTERISTICS CURVES(Con.)



8.OUTLINE AND DIMENSIONS
SOT23-6


SOT23-6			
DIM	MIN	NOR	MAX
A	0.90	1.00	1.10
A1	0.01	0.06	0.10
b	0.25	0.40	0.50
c	0.10	0.17	0.26
D	2.80	2.90	3.10
E	1.30	1.60	1.70
e	0.85	0.95	1.05
e1	1.80	1.90	2.00
L	0.20	0.40	0.60
L1	0.60REF		
HE	2.50	2.80	3.00
θ	0°	-	10°

9.SOLDERING FOOTPRINT


SOT23-6	
DIM	(mm)
X	0.70
Y	0.90
A	2.40
B	0.95
C	0.95

