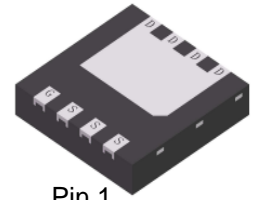


LNB8304SDT0AG

N-Channel 30-V (D-S) MOSFET



Pin 1

DFN3333-8A

1. FEATURES

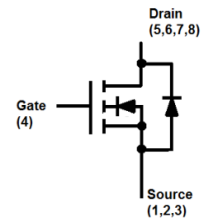
- Low RDS(on) trench technology.
- Low thermal impedance.
- Fast switching speed.
- We declare that the material of product are Halogen Free and compliance with RoHS requirements.

2. APPLICATION

- Power Routing
- DC/DC Conversion
- Motor Drives

3. ORDERING INFORMATION

Device	Marking	Shipping
LNB8304SDT0AG	N4S	2000/Tape&Reel



4. MAXIMUM RATINGS(Ta = 25°C unless otherwise stated)

Parameter		Symbol	Limits	Unit
Drain-to-Source Voltage		VDS	30	V
Gate-to-Source Voltage		VGS	±20	V
Continuous Drain Current(Note 1)	TA=25°C	ID	17	A
	TA=75°C		13	
	TC=25°C		50	
	TC=75°C		38	
Pulsed Drain Current (Note 2)		IDM	68	A
Avalanche Current		IAS	31	A
Avalanche Energy(L=0.1mH)		EAS	48.05	mJ
Power Dissipation(Note 1)	TA=25°C	PD	2.1	W
	TC=25°C		20	
Operating Junction and Storage Temperature Range		Tj/Tstg	-55~+150	°C

5. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Maximum Junction-to-Ambient(Note 1)	RθJA	60	°C/W
Maximum Junction-to-Case	RθJC	6	

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

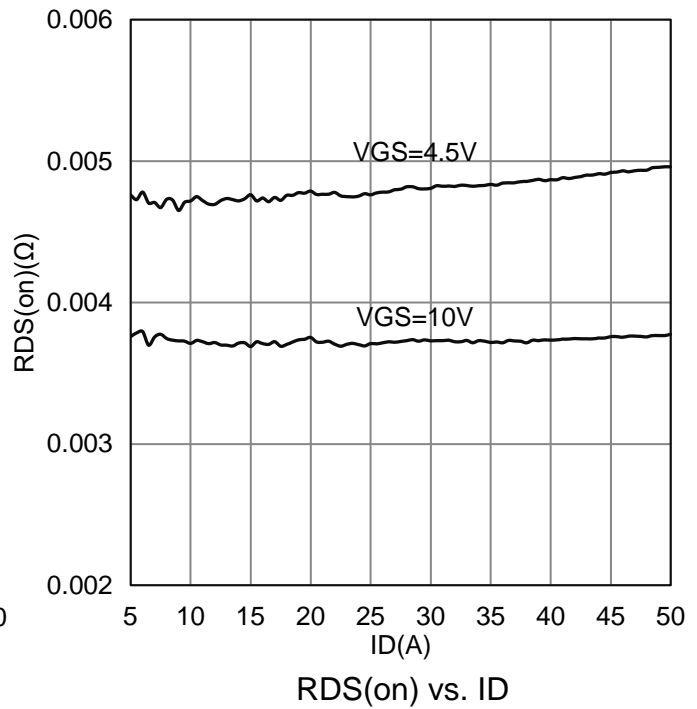
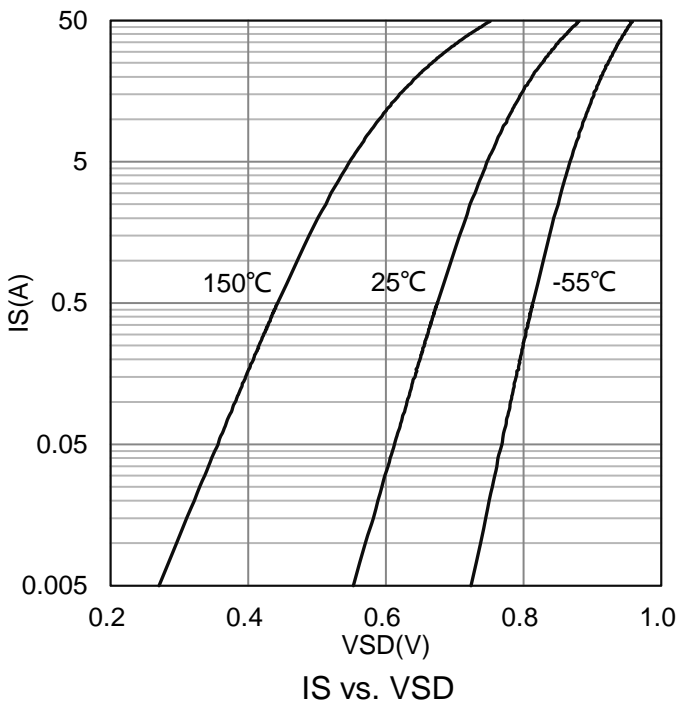
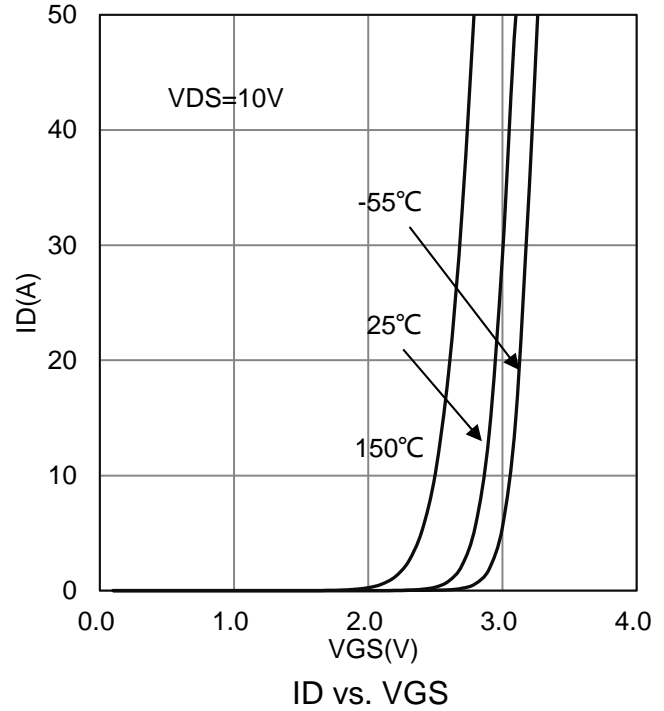
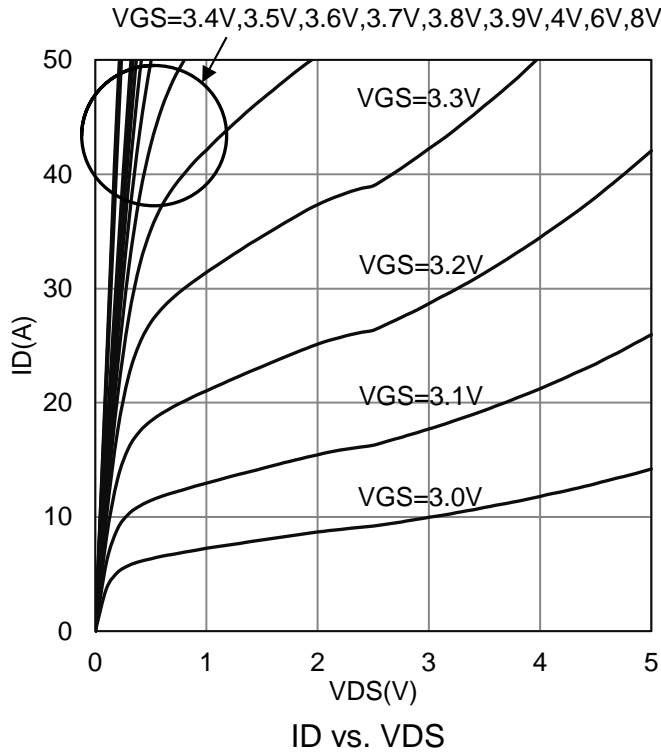
2.Pulse width limited by maximum junction temperature

6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

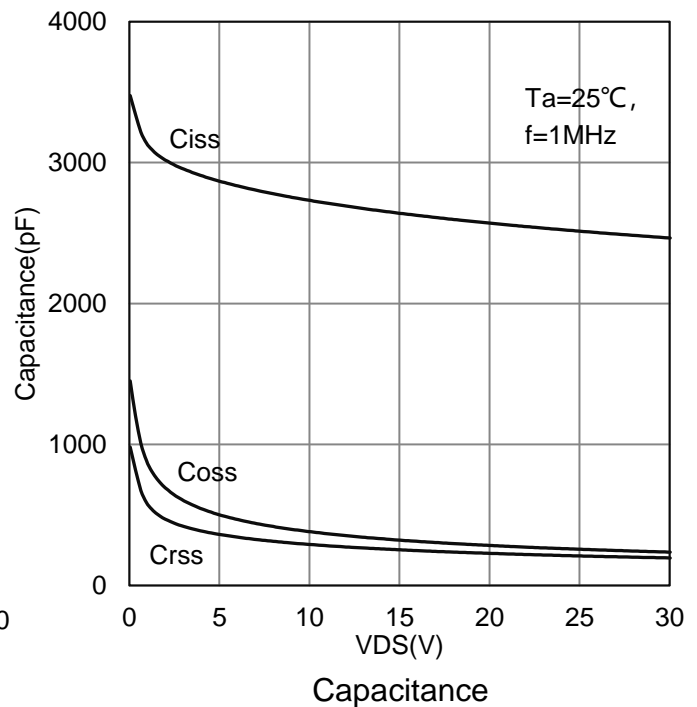
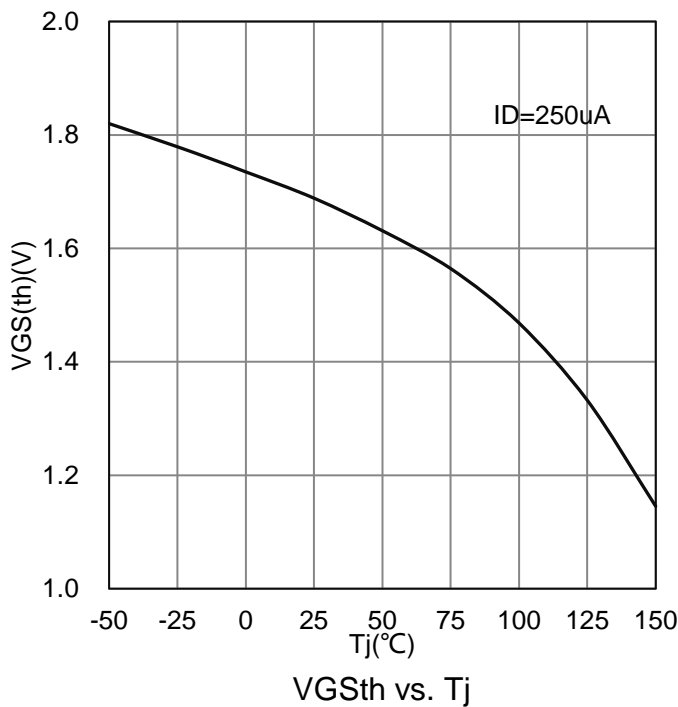
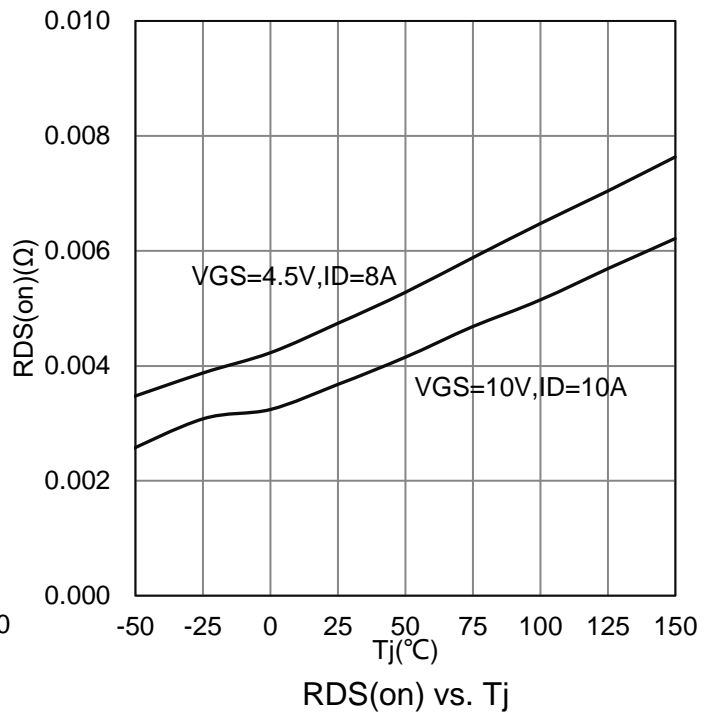
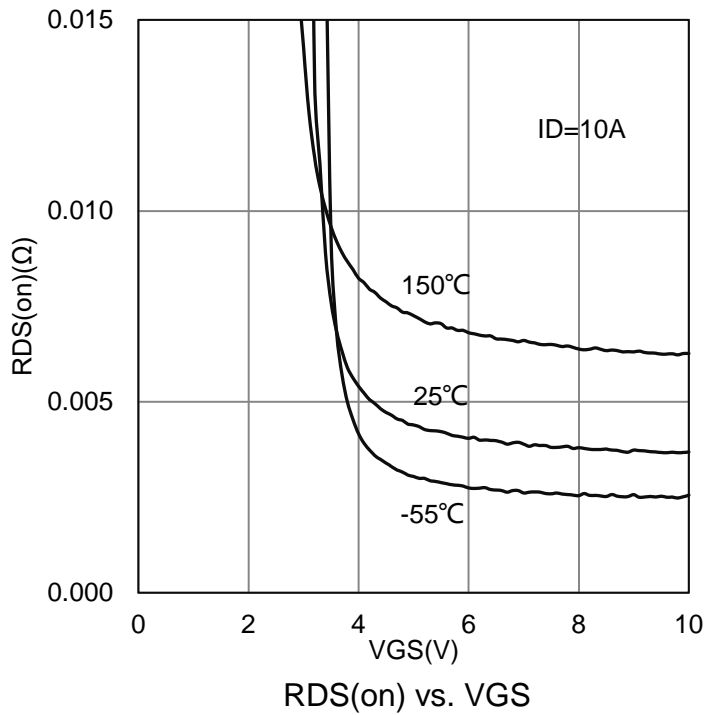
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Static					
Drain-Source Breakdown Voltage (VGS = 0 V, ID = 250 μA)	V(BR)DSS	30	-	-	V
Gate-Source Threshold Voltage (VDS = VGS, ID = 250 μA)	VGS(th)	1.2	1.7	2.2	V
Gate-Body Leakage (VDS = 0 V, VGS = ±20 V)	IGSS	-	-	±100	nA
Zero Gate Voltage Drain Current (VDS = 30 V, VGS = 0 V)	IDSS	-	-	1	μA
Drain-Source On-Resistance(Note 3) (VGS = 10 V, ID = 10 A) (VGS = 4.5 V, ID = 8 A)	RDS(on)	- -	3.4 4	4 6.3	mΩ
Dynamic					
Input Capacitance	(VDS = 15 V, VGS = 0 V, f = 1MHz)	Ciss	-	2700	pF
Output Capacitance		Coss	-	325	
Reverse Transfer Capacitance		Crss	-	255	
Total Gate Charge	(VDS = 15 V, VGS = 10 V, ID = 10 A)	Qg	-	47	nC
Gate-Source Charge		Qgs	-	7.5	
Gate-Drain Charge		Qgd	-	10.5	
Turn-On Delay Time	(VDS = 15 V, ID = 3 A, VGS = 10 V, RG = 3 Ω, RL = 5 Ω)	td(on)	-	16	ns
Rise Time		tr	-	11	
Turn-Off Delay Time		td(off)	-	58	
Fall Time		tf	-	14.5	
Forward Voltage (IS=2A, VGS = 0V)	VSD	-	-	1.3	V

3.Pulse test: PW ≤ 300μs duty cycle ≤ 2%.

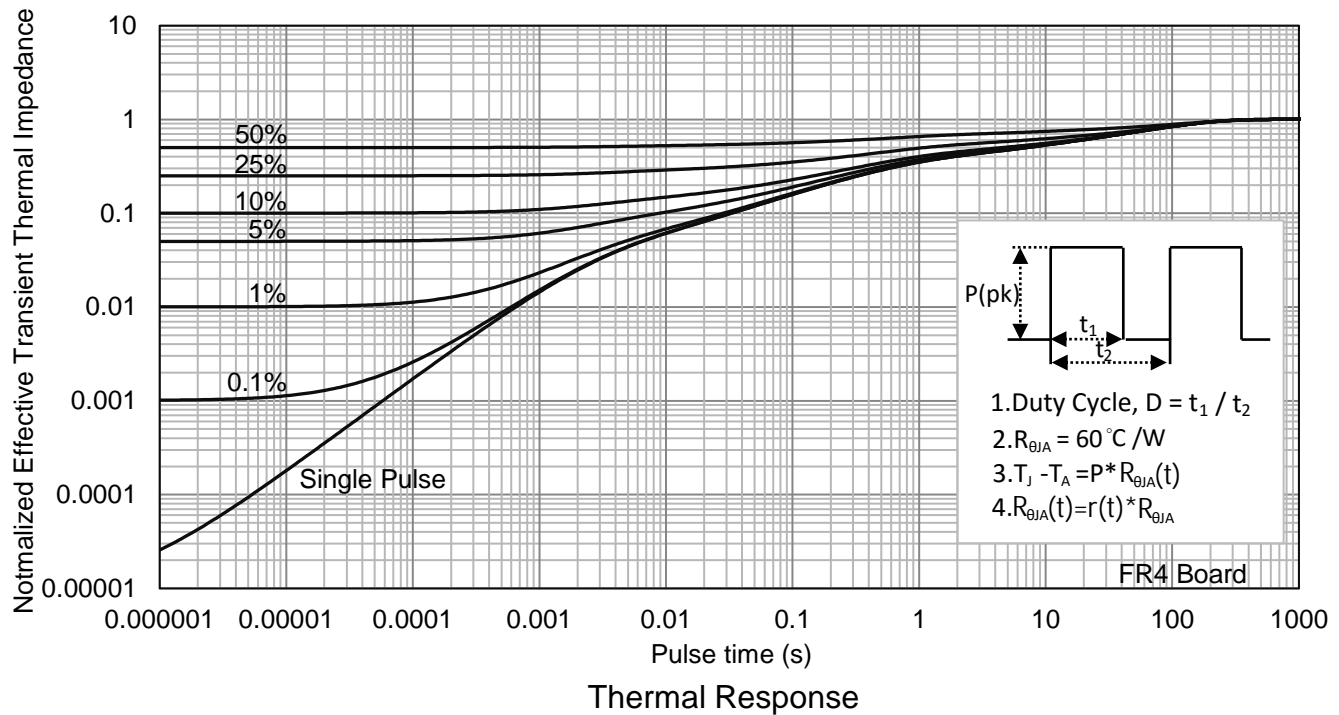
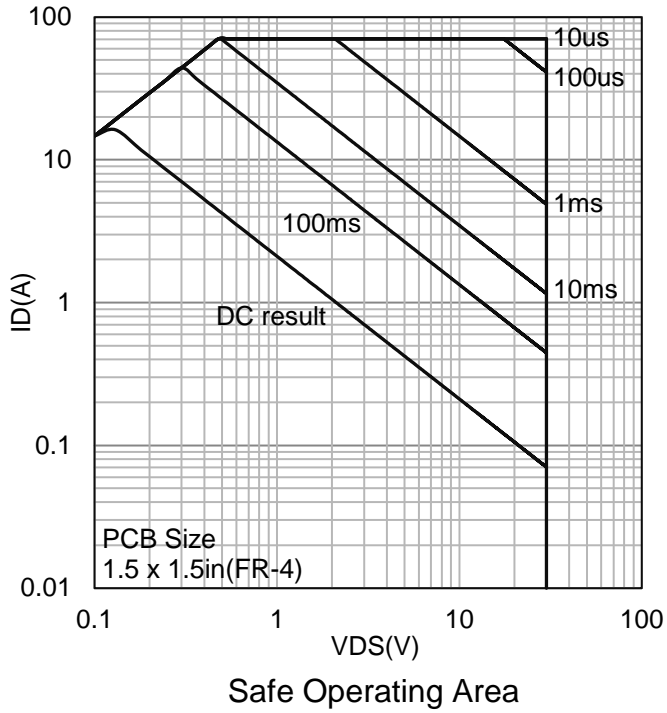
7. ELECTRICAL CHARACTERISTICS CURVES



7. ELECTRICAL CHARACTERISTICS CURVES(Con.)

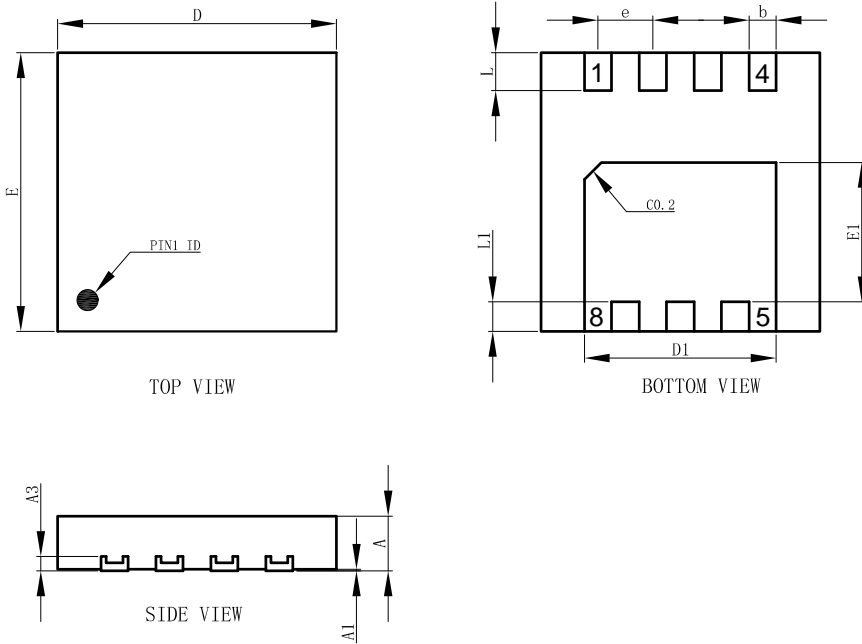


7. ELECTRICAL CHARACTERISTICS CURVES(Con.)



8. OUTLINE AND DIMENSIONS

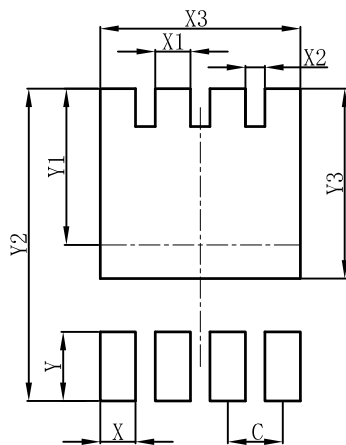
DFN3333-8A



DFN3333-8A			
DIM	MIN	NOR	MAX
A	0.60	0.65	0.70
A1	0.00	0.03	0.05
b	0.27	0.32	0.37
D	3.25	3.30	3.35
E	3.25	3.30	3.35
D1	2.22	2.27	2.32
E1	1.60	1.65	1.70
e	0.65BSC		
L	0.40	0.45	0.50
L1	0.30	0.35	0.40
A3	0.152REF.		
All Dimensions in mm			

9. SOLDERING FOOTPRINT

DFN3333-8A



DFN3333-8A	
DIM	(mm)
C	0.65
X	0.42
X1	0.42
X2	0.23
X3	2.37
Y	0.70
Y1	1.85
Y2	3.70
Y3	2.25

DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
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单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)