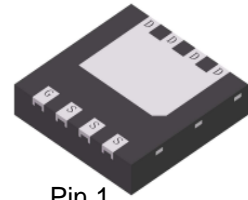


LNB88078SDT0AG

N-Channel 80V (D-S) MOSFET



Pin 1
DFN3333-8A

1. FEATURES

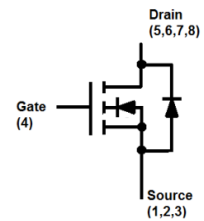
- $R_{DS(ON)} \leq 7.8m\Omega @ V_{GS}=10V$.
- $R_{DS(ON)} \leq 19.3m\Omega @ V_{GS}=6V$.
- Exceptional on-resistance and maximum DC current capability.
- We declare that the material of product are Halogen Free and compliance with RoHS requirements.

2. APPLICATION

- DC/DC Conversion

3. ORDERING INFORMATION

Device	Marking	Shipping
LNB88078SDT0AG	S78	2000/Tape&Reel



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

Parameter		Symbol	Limits	Unit
Drain-to-Source Voltage		VDS	80	V
Gate-to-Source Voltage		VGS	± 20	V
Continuous Drain Current(Note 1)	TA=25°C	ID	11	A
	TA=75°C		8.5	
	TC=25°C		32	
	TC=75°C		25	
Pulsed Drain Current (Note 2)		IDM	44	A
Avalanche Current		IAS	34	A
Avalanche Energy(L=0.1mH)		EAS	57.8	mJ
Power Dissipation(Note 1)	TA=25°C	PD	2.3	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	55	°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.

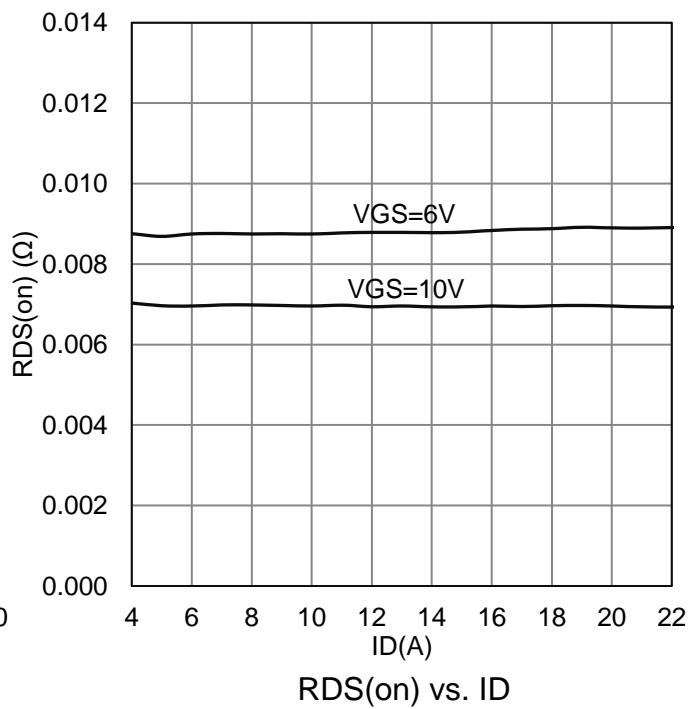
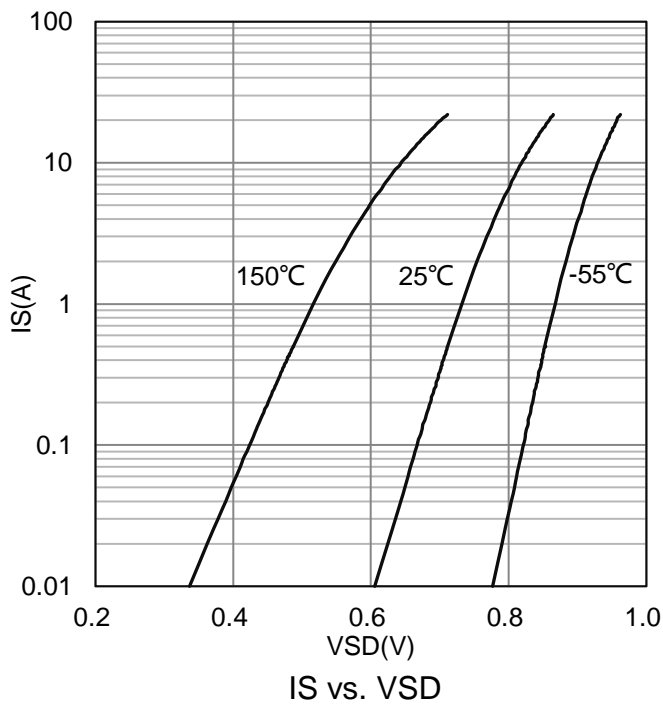
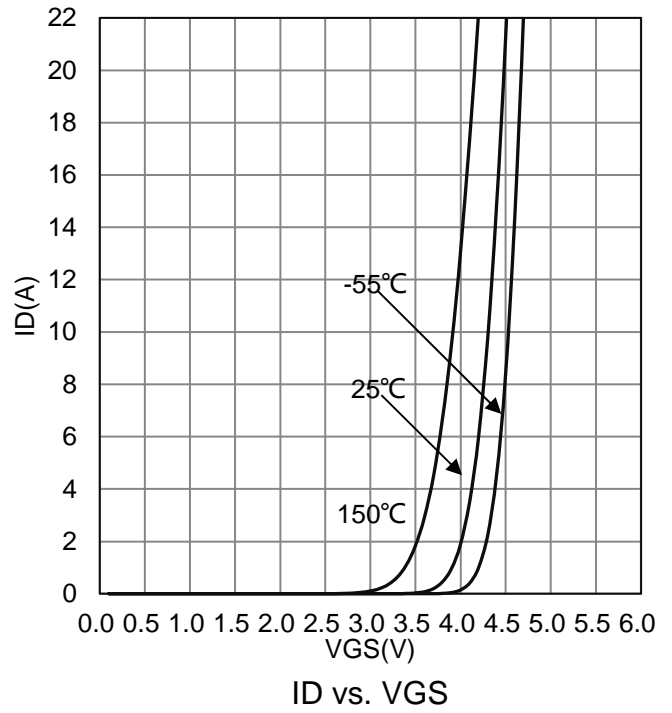
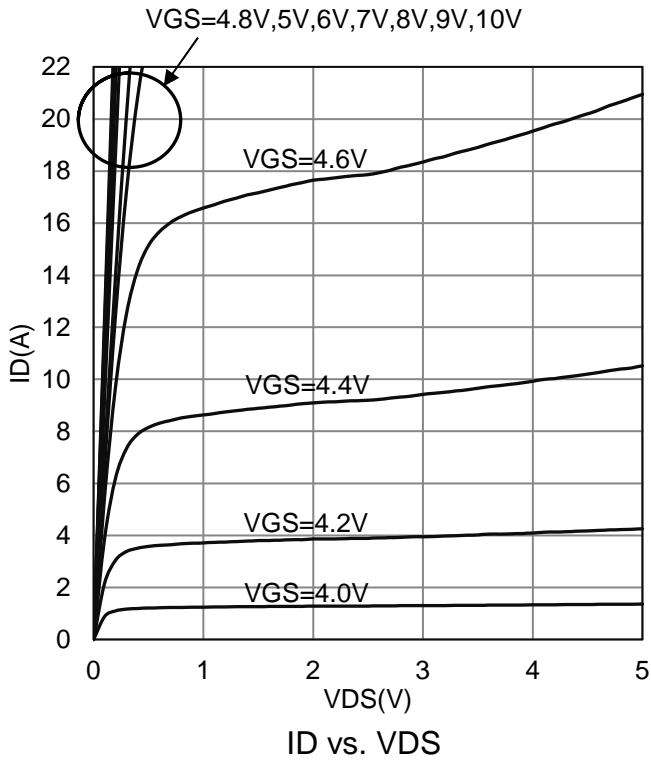
2. Pulse width limited by maximum junction temperature

6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

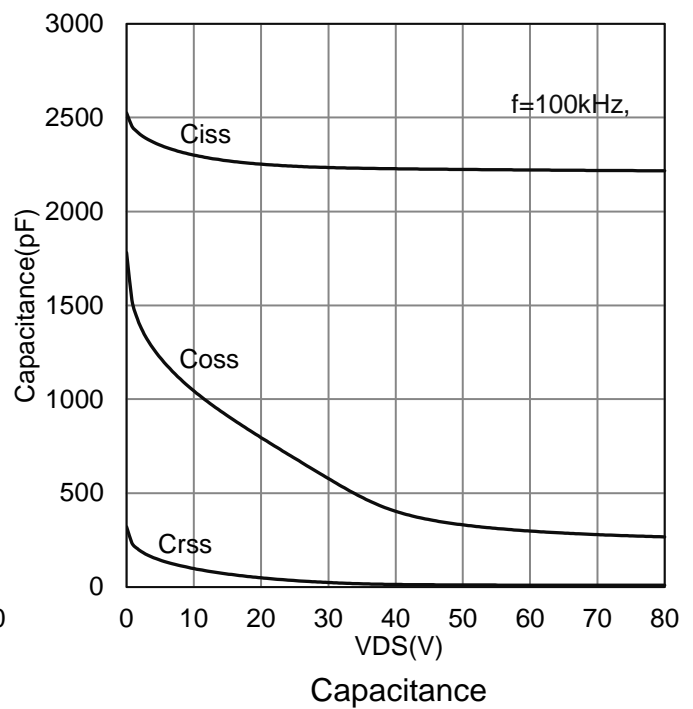
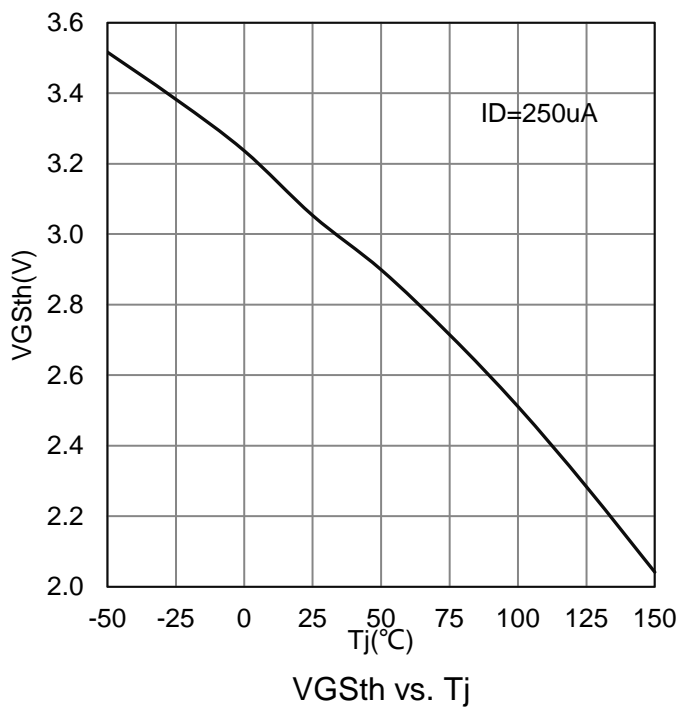
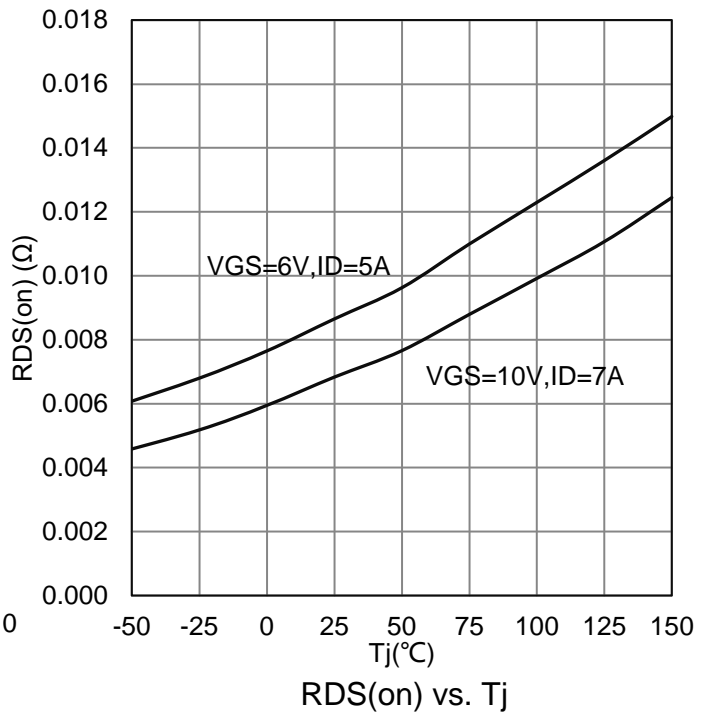
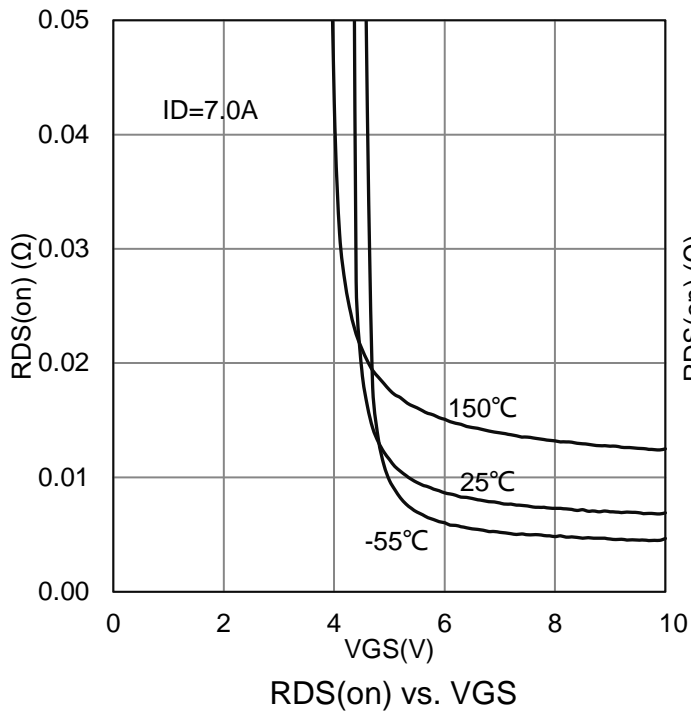
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Static					
Drain-Source Breakdown Voltage (VGS = 0 V, ID = 250 μA)	V(BR)DSS	80	-	-	V
Gate-Source Threshold Voltage (VDS = VGS, ID = 250 μA)	VGS(th)	2	3	4	V
Gate-Body Leakage (VDS = 0 V, VGS = ±20 V)	IGSS	-	-	±100	nA
Zero Gate Voltage Drain Current (VDS = 80 V, VGS = 0 V)	IDSS	-	-	1	μA
Drain-Source On-Resistance(Note 3) (VGS = 10 V, ID = 7 A) (VGS = 6 V, ID = 5 A)	RDS(on)	-	6.5 9	7.8 19.3	mΩ
Forward Voltage (IS= 1 A, VGS = 0 V)	VSD	-	-	1.2	V
Dynamic					
Input Capacitance	(VDS = 40 V, VGS = 0 V, f = 100kHz)	Ciss	-	2248	pF
Output Capacitance		Coss	-	405	
Reverse Transfer Capacitance		Crss	-	13.5	
Total Gate Charge	(VDS = 40 V, VGS = 10 V, ID = 7 A)	Qg	-	33	nC
Gate-Source Charge		Qgs	-	8.4	
Gate-Drain Charge		Qgd	-	7	
Turn-On Delay Time	(VDS = 40 V, ID = 7 A, VGS = 10 V, RG = 6 Ω)	td(on)	-	20.5	ns
Rise Time		tr	-	8.5	
Turn-Off Delay Time		td(off)	-	46	
Fall Time		tf	-	11	

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

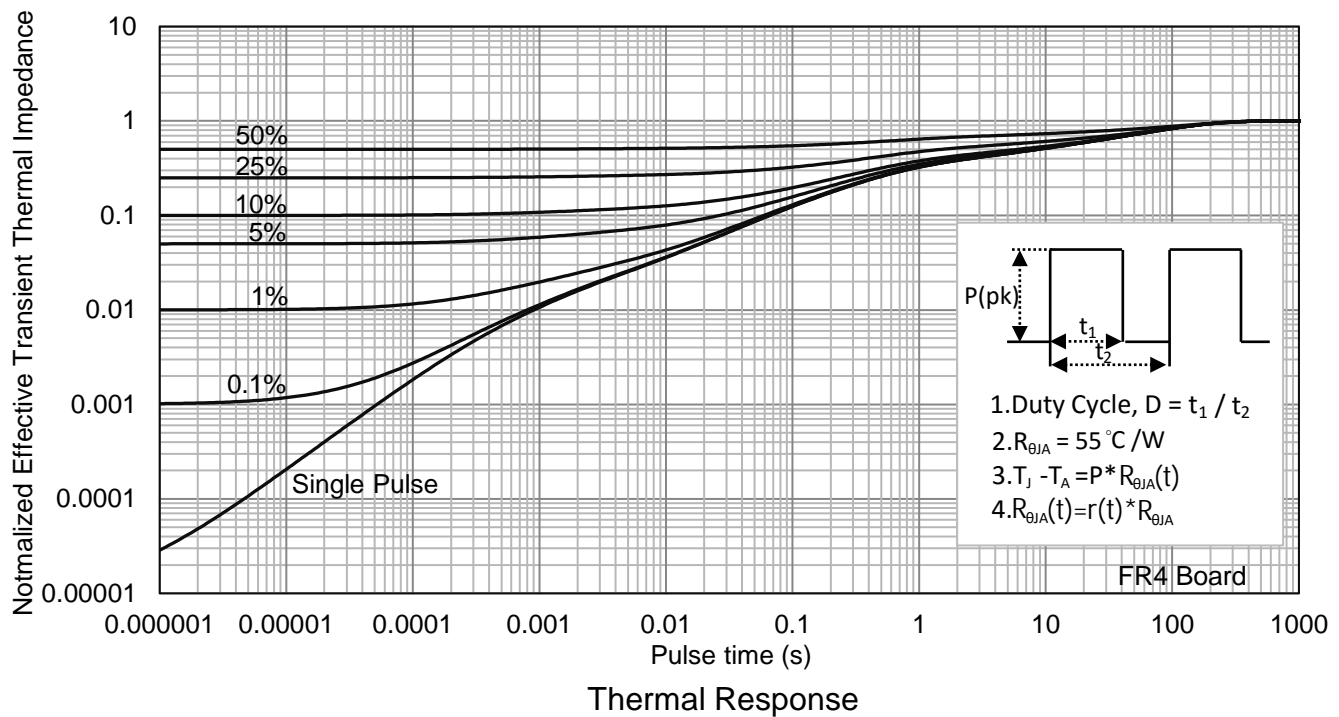
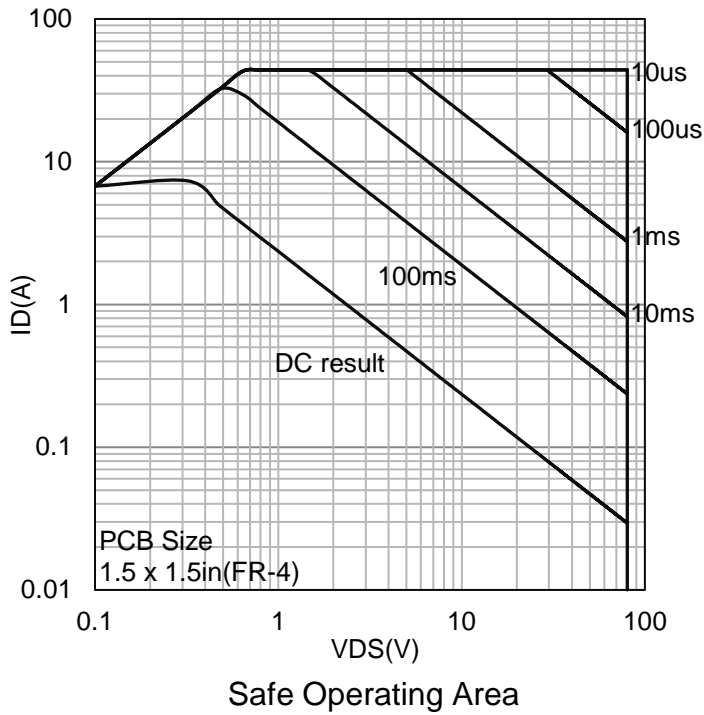
7. ELECTRICAL CHARACTERISTICS CURVES



7. ELECTRICAL CHARACTERISTICS CURVES(Con.)

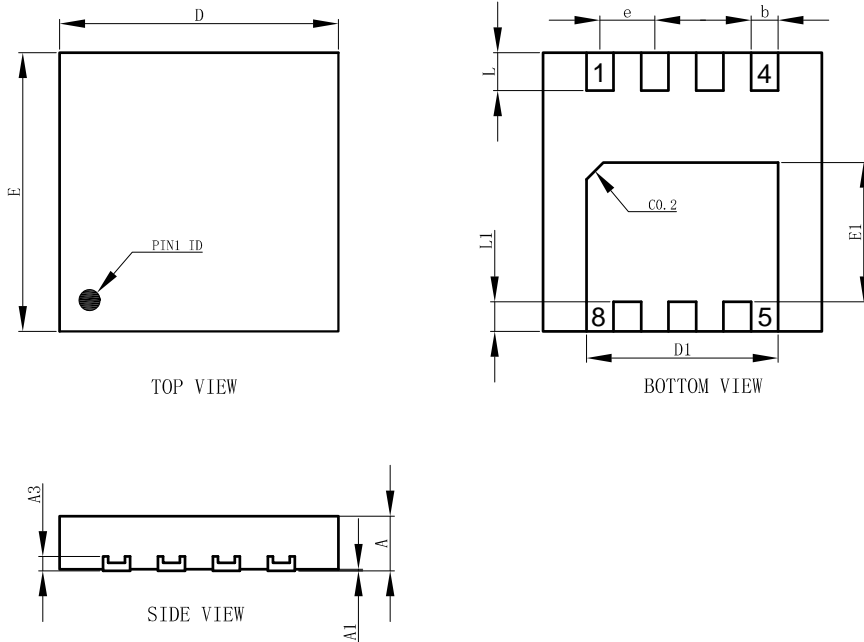


7. ELECTRICAL CHARACTERISTICS CURVES(Con.)



8.OUTLINE AND DIMENSIONS

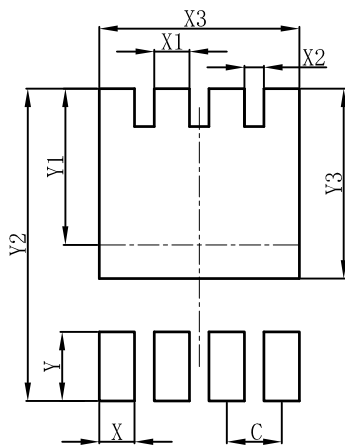
DFN3333-8A



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\(乐山无线电\)](#)