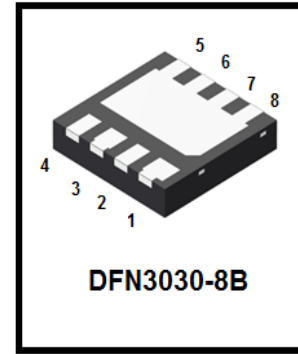


# LN8544DT1AG

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



### 1. FEATURES

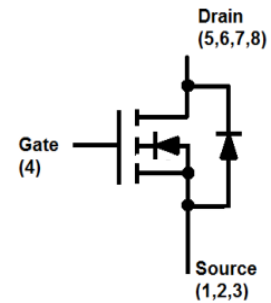
- Low Gate Charge
- High Current Capability
- We declare that the material of product are Halogen Free and compliance with RoHS requirements.

### 2. APPLICATION

- DC/DC Converters in Computing, Servers, and POL
- Isolated DC/DC Converters in Telecom and Industrial

### 3. ORDERING INFORMATION

Device	Marking	Shipping
LN8544DT1AG	854	3000/Tape&Reel



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

Parameter	Symbol	Limits	Unit	
Drain-to-Source Voltage	VDSS	30	V	
Gate-to-Source Voltage	VGS	±20	V	
Avalanche Current	IAS	31	A	
Avalanche energy L=0.1mH	EAS	48	mJ	
Continuous Drain Current(Note 1)	ID	TC =25°C	84	A
		TC =70°C	67	
		TA =25°C	22.7	
		TA =70°C	18.2	
Pulsed Drain Current	IDM	91	A	
Maximum Power Dissipation(Note 1)	PD	TC =25°C	52	W
		TC =70°C	33	
		TA =25°C	3.8	
		TA =70°C	2.4	
Operating Junction Temperature	TJ	150	°C	
Storage Temperature Range	Tstg	-55 ~+150		
Thermal Resistance-Junction to Ambient(Note 1)	RθJA	33	°C/W	
Thermal Resistance-Junction to Case(Note 1)	RθJC	2.4		

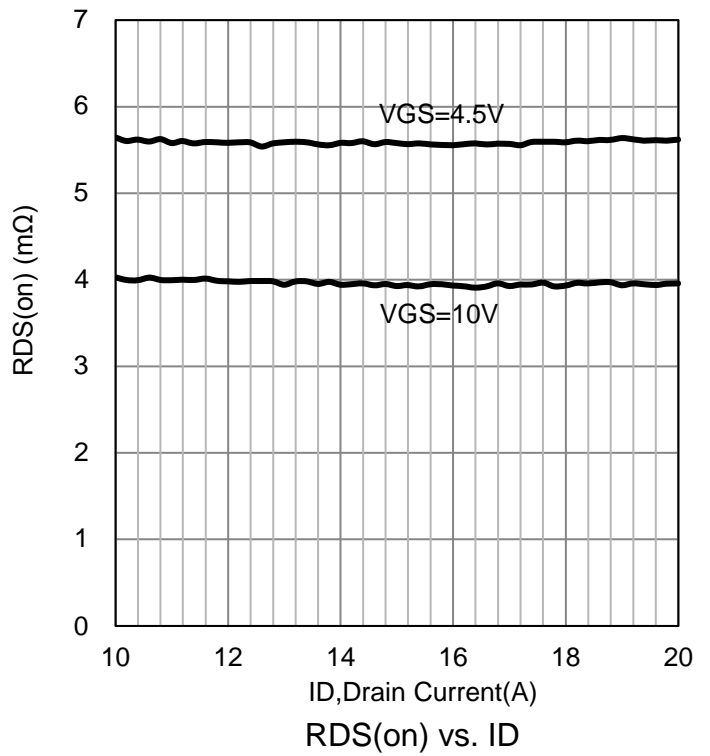
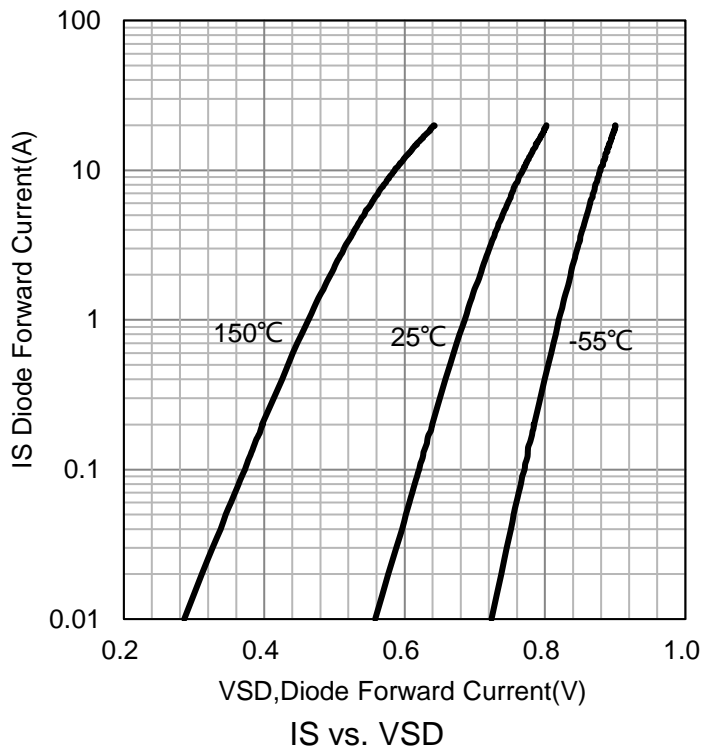
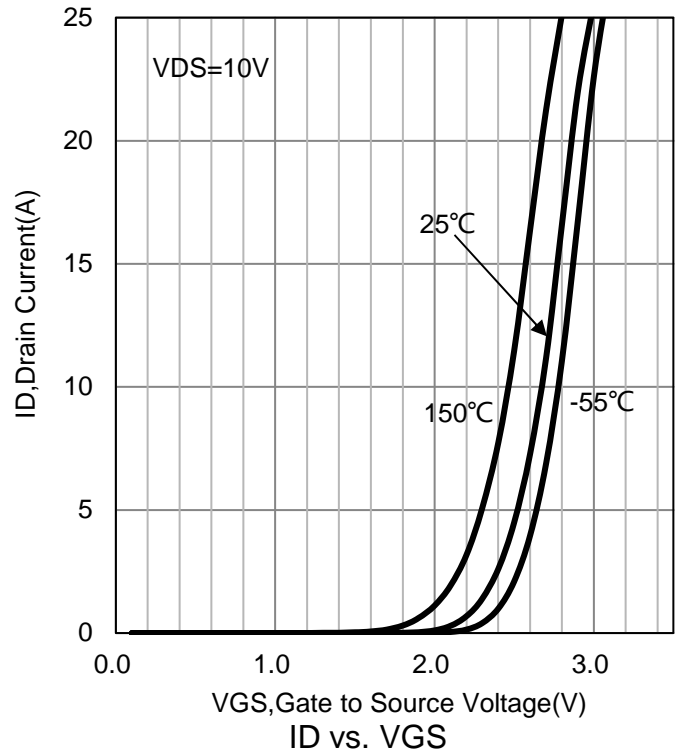
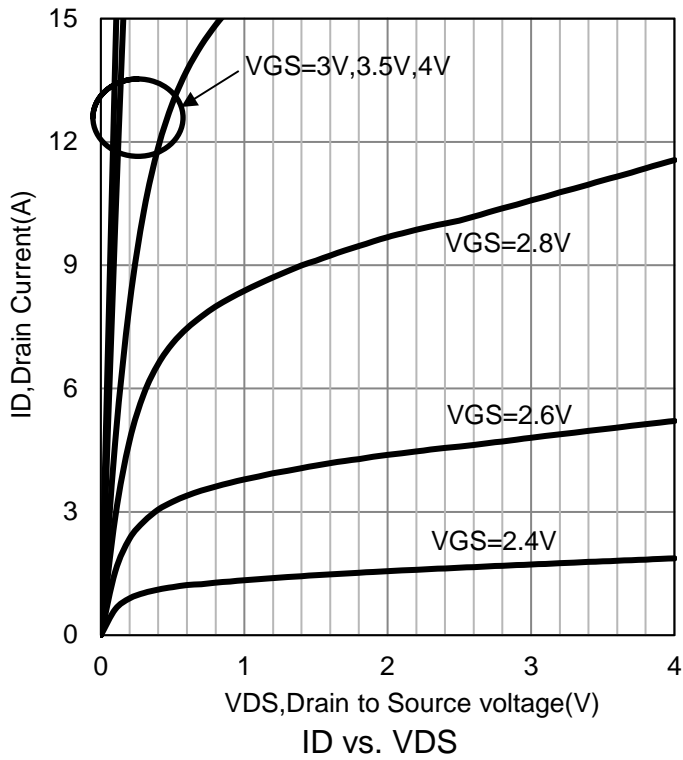
1.The device mounted on 1in<sup>2</sup> FR4 board with 2 oz copper

**5. ELECTRICAL CHARACTERISTICS**

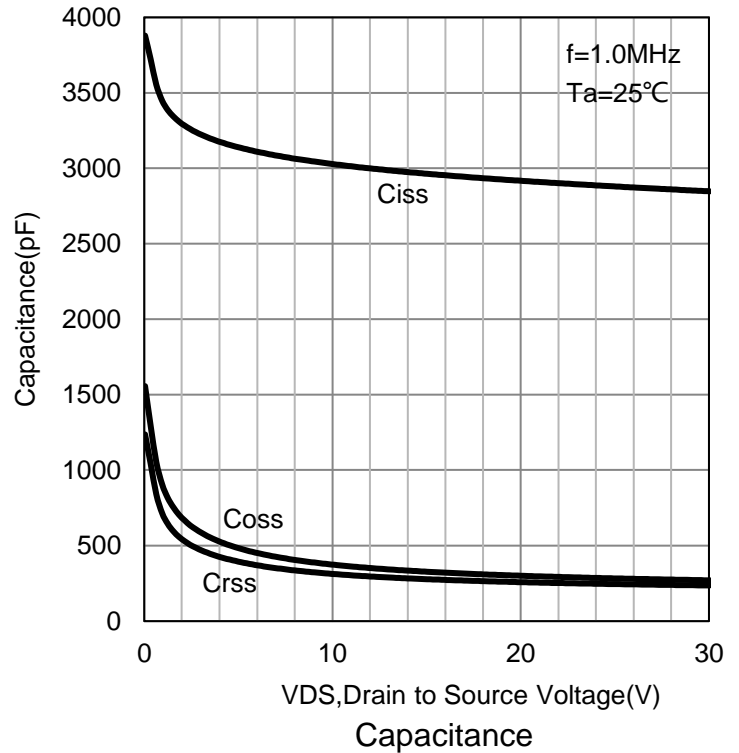
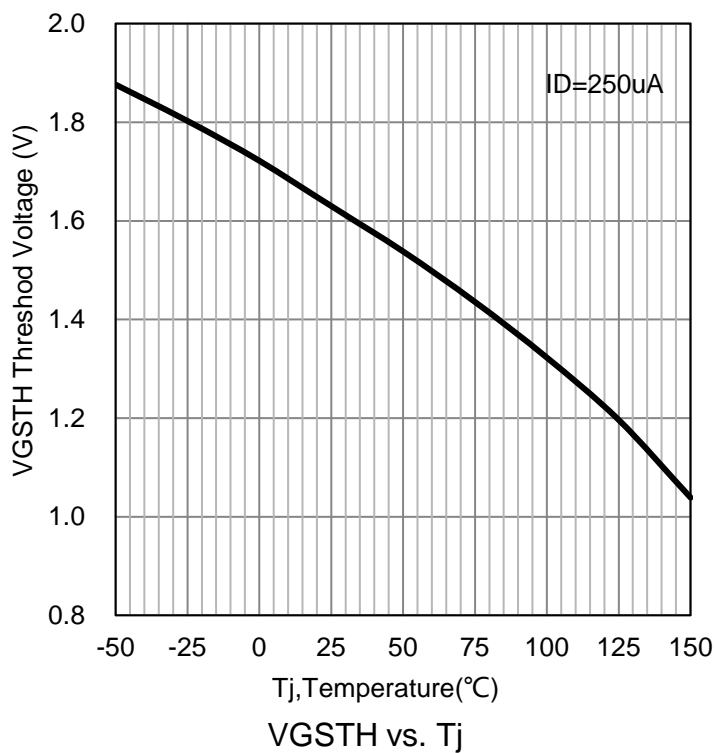
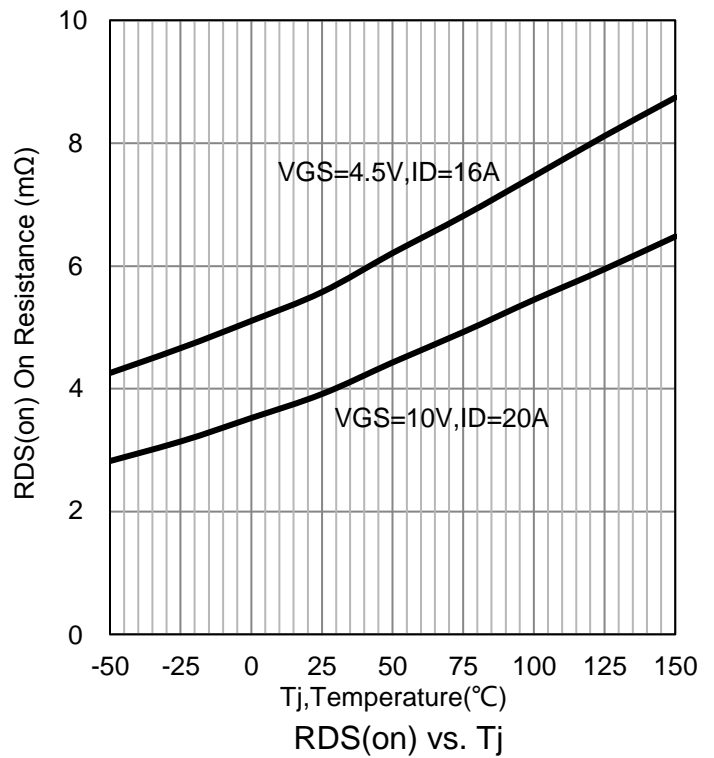
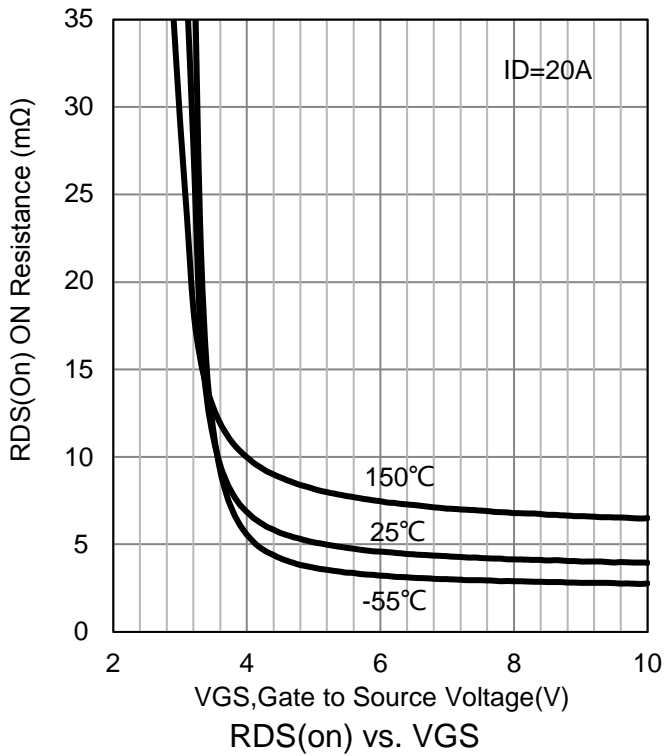
Characteristic	Symbol	Min.	Typ.	Max.	Unit
<b>Static</b>					
Drain-Source Breakdown Voltage (VGS = 0V, ID = 250μA)	V(BR)DSS	30	-	-	V
Gate Threshold Voltage (VDS = VGS, ID = 250μA)	VGS(th)	1	-	3	V
Gate Leakage Current (VDS = 0 V, VGS = ±20 V)	IGSS	-	-	±100	nA
Zero Gate Voltage Drain Current (VDS = 30V, VGS = 0V)	IDSS	-	-	1	μA
Drain-Source On-Resistance(Note 2) (VGS = 10 V, ID = 20 A) (VGS = 4.5 V, ID = 16 A)	RDS(on)	- -	3.7 5.4	5.6 7.6	mΩ
Diode Forward Voltage (IS = 1.0 A, VGS = 0 V)	VSD	-	0.7	1.2	V
<b>Dynamic</b>					
Total Gate Charge (VDS = 15V, VGS = 10V, ID = 20A)	Qg	-	54	-	nC
Total Gate Charge	Qg	-	27	-	
Gate-Source Charge	Qgs	-	9.5	-	
Gate-Drain Charge	Qgd	-	11	-	
Input Capacitance	Ciss	-	2450	-	pF
Output Capacitance	Coss	-	393	-	
Reverse Transfer Capacitance	Crss	-	129	-	
Gate-Resistance (VDS = 0V, VGS = 0V, F = 1MHz)	Rg	-	1.8	-	Ω
Turn-On Delay Time	td(on)	-	23	-	ns
Rise Time	tr	-	16	-	
Turn-Off Delay Time	td(off)	-	73	-	
Fall Time	tf	-	12	-	

2. Pulse test: pulse width ≤ 300μs, duty cycle ≤ 2%, Guaranteed by design, not subject to production testing.

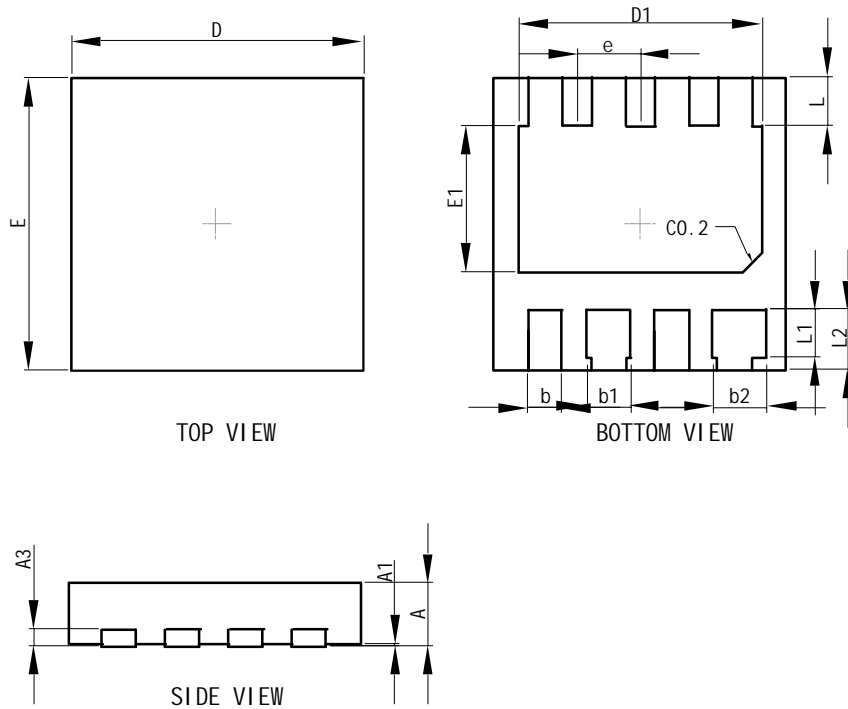
**6. ELECTRICAL CHARACTERISTICS CURVES**



**6. ELECTRICAL CHARACTERISTICS CURVES(Con.)**

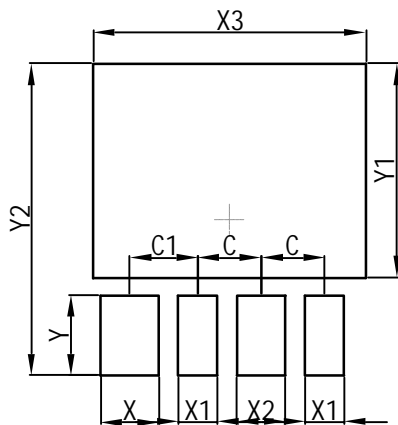


### 7. OUTLINE AND DIMENSIONS



DFN3030-8B			
Dim	Min	Nor	Max
A	0.60	0.65	0.70
A1	0.00	0.03	0.05
b	0.30	0.35	0.40
b1	0.40	0.45	0.50
b2	0.50	0.55	0.60
D	2.95	3.00	3.05
E	2.95	3.00	3.05
D1	2.45	2.50	2.55
E1	1.45	1.50	1.55
e	0.65BSC		
L	0.45	0.50	0.55
L1	0.44	0.49	0.54
L2	0.57	0.62	0.67
A3	0.152REF.		
All Dimensions in mm			

### 8. SOLDERING FOOTPRINT



DFN3030-8B	
Dim	(mm)
C	0.65
C1	0.70
X	0.60
X1	0.40
X2	0.50
X3	2.80
Y1	2.20
Y2	3.20
Y	0.82

单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)