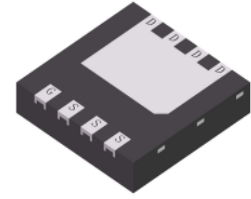


# LNB8462DT0AG

## 60V N-Channel MOSFET

### 1. FEATURES

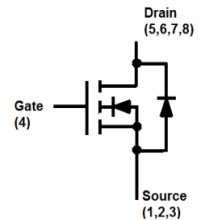
- Improved dv/dt capability
- Fast switching
- We declare that the material of product compliance with RoHS requirements and Halogen Free.



DFN3333-8A

### 2. APPLICATIONS

- Networking
- Load Switch
- LED applications
- Quick Charger



### 3. DEVICE MARKING AND RESISTOR VALUES

Device	Marking	Shipping
LNB8462DT0AG	65D	2000/Tape&Reel

### 4. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit	
Drain-to-Source Voltage	VDS	60	V	
Gate-to-Source Voltage	VGS	+20/-12	V	
Continuous Drain Current	ID	TA=25 °C	18	A
		TA=100 °C	11	
		TC=25 °C	50	
		TC=100 °C	29	
Pulsed Drain Current(Note 2)	IDM	72	A	
Avalanche Current(L=0.1mH)	IAS	25.2	A	
Avalanche energy(L=0.1mH)	EAS	31.75	mJ	
Power Dissipation(Note 1)	PD	TA=25 °C	2	W
		TA=100 °C	1.1	
		TC=25 °C	21	
		TC=100 °C	12	
Operating Junction and Storage Temperature Range	Tj/Tstg	-50~+150	°C	

### 5. THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Unit
Junction-to-Ambient (Note 1)	RθJA	60	°C/W
Junction-to-Ambient (Note 3)	RθJA	170	
Junction-to-Case (Note 1)	RθJC	6	

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

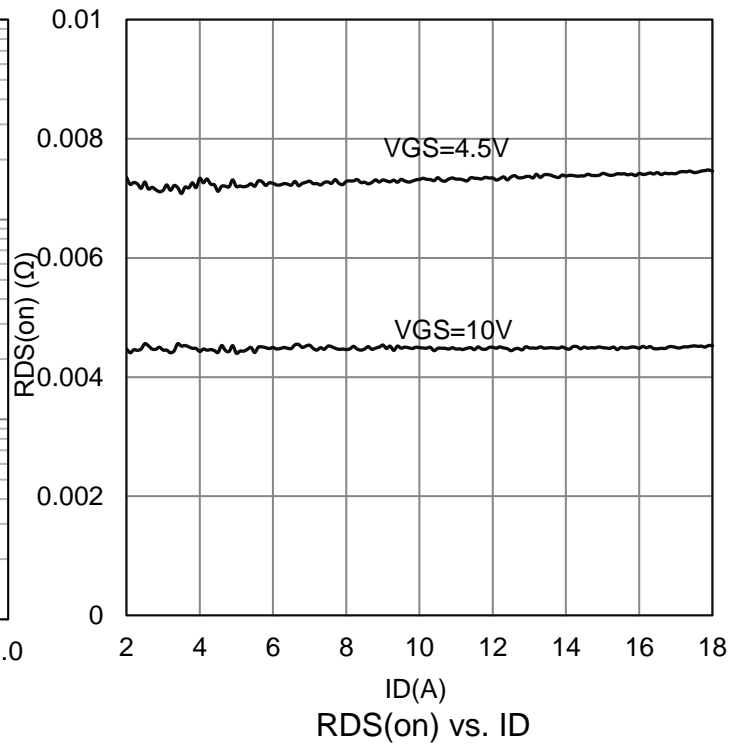
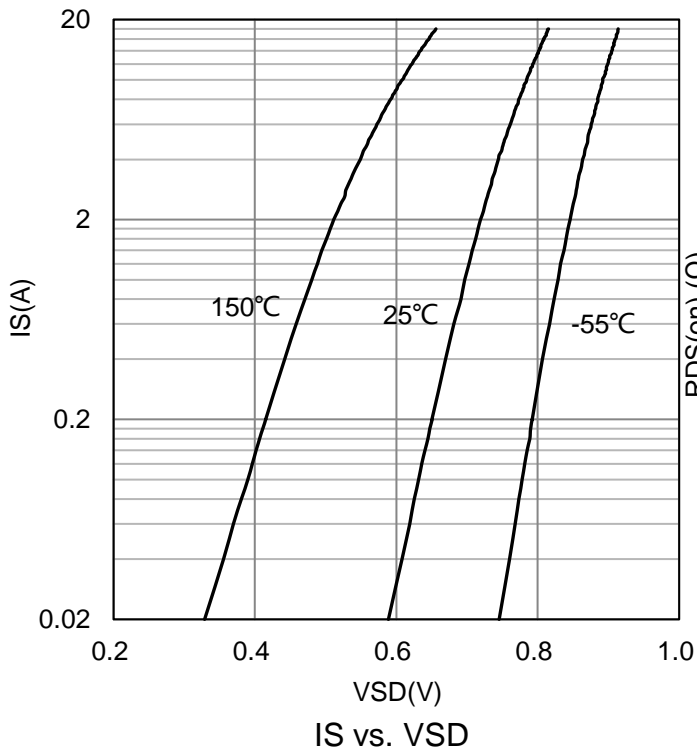
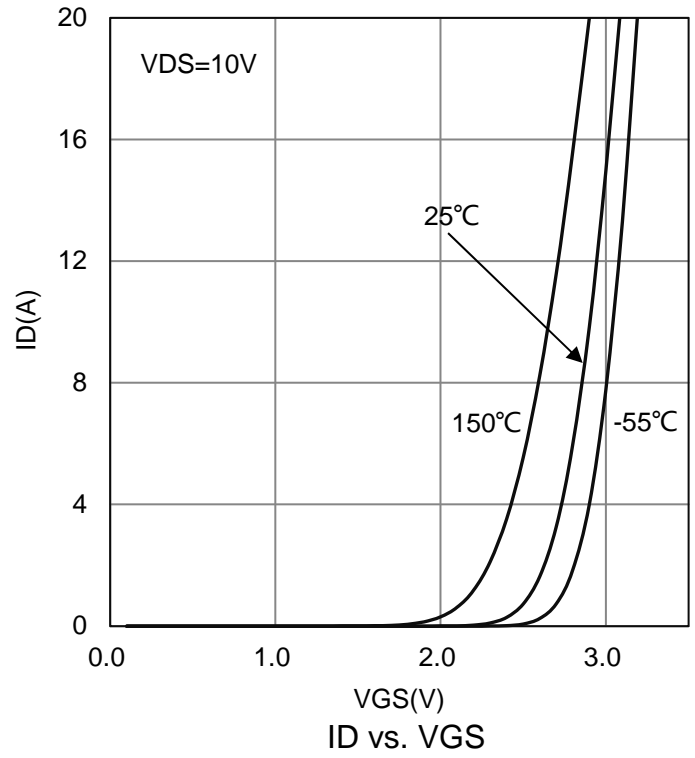
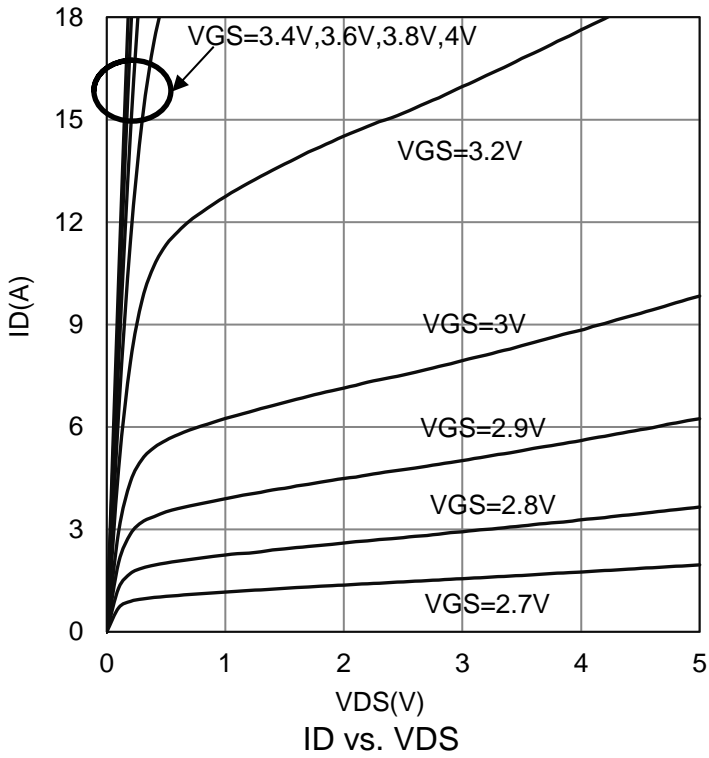
2.Pulse width limited by maximum junction temperature.

3.Surface mounted on FR4 board using the minimum recommended pad size(30.0mm×25.0mm×1.6mm, 1 oz Cu).

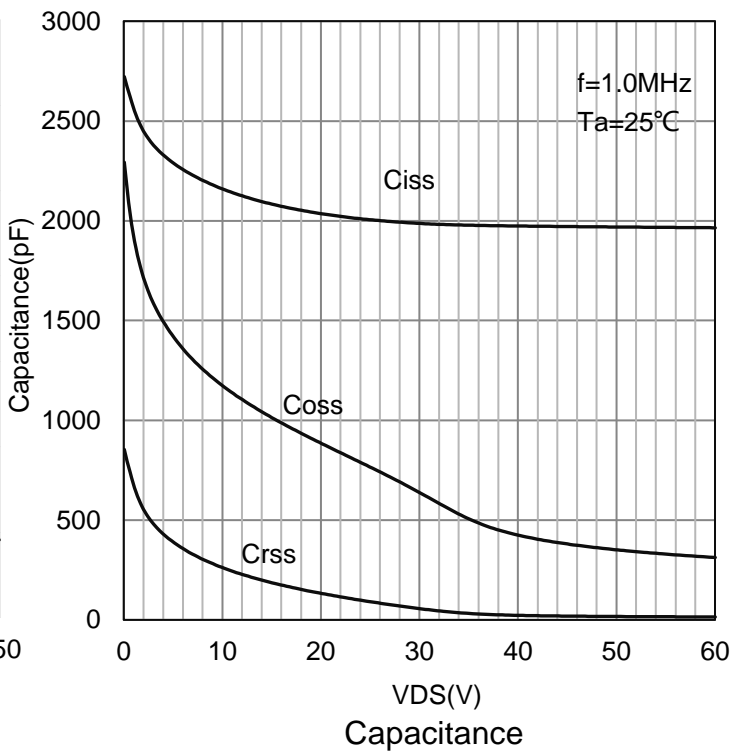
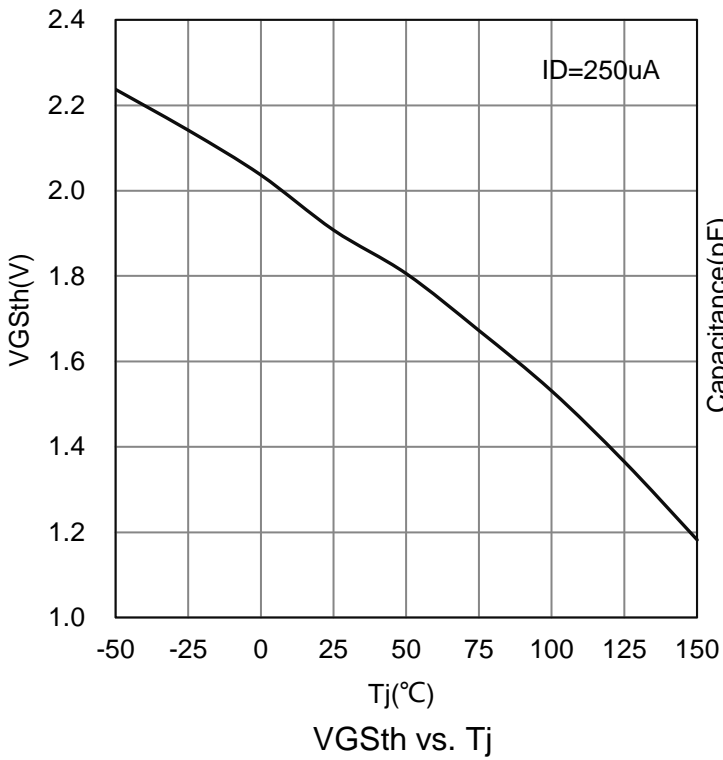
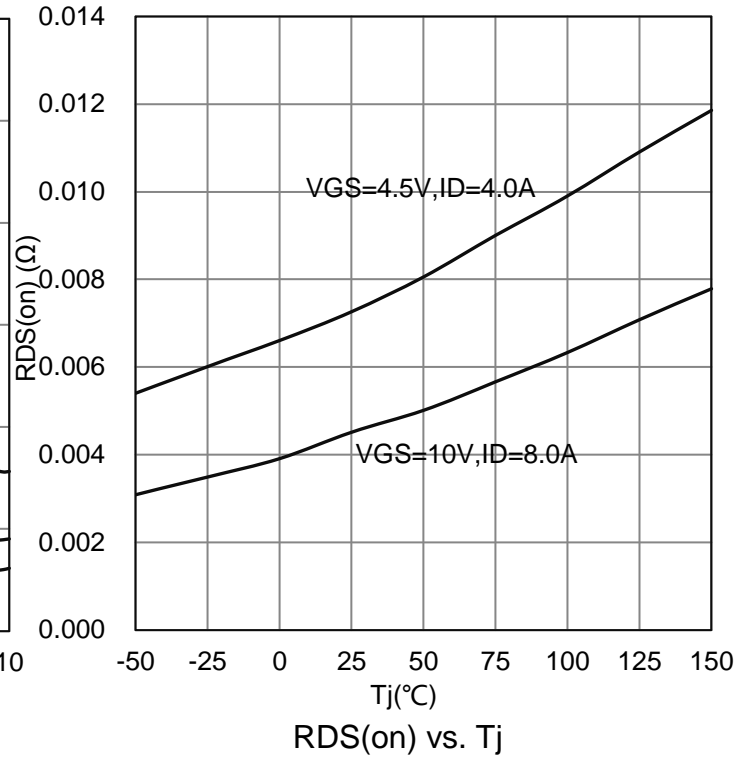
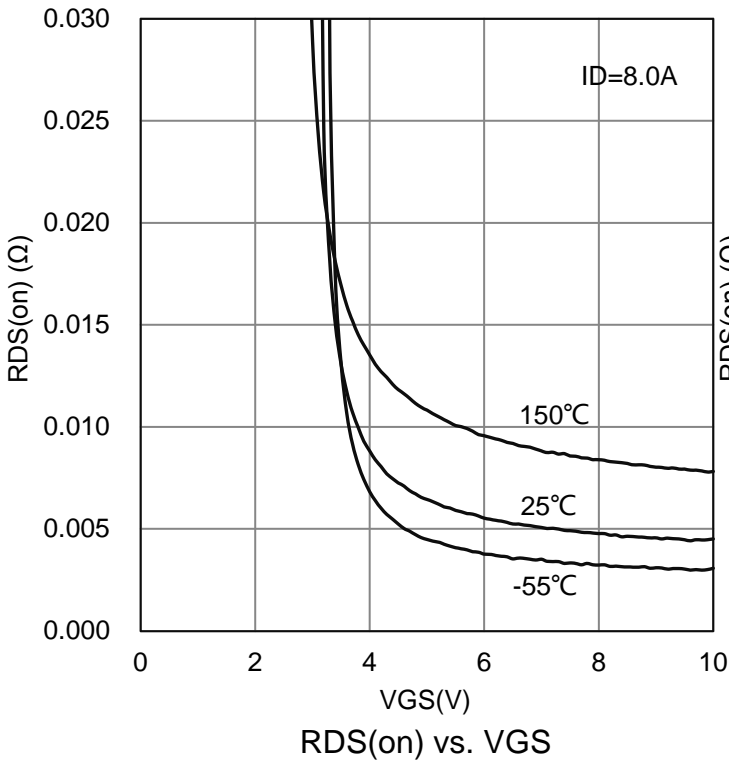
**6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)**

Characteristic	Symbol	Min.	Typ.	Max.	Unit
<b>STATIC</b>					
Drain to Source Breakdown Voltage (VGS = 0 V, ID = 250 μA)	BVDSS	60	-	-	V
Drain-to-Source Leakage Current (VDS = 60 V, VGS = 0 V)	IDSS	-	-	1	μA
Gate-Body leakage current (VDS = 0 V, VGS = ±20 V)	IGSS	-	-	±100	nA
Gate Threshold Voltage (VDS = VGS, ID = 250 μA)	VGS(th)	1	1.5	2.5	V
Drain-to-Source On-Resistance (VGS = 10 V, ID = 8 A) (VGS = 4.5 V, ID = 4 A)	RDS(ON)	- -	- -	6.2 9.3	mΩ
<b>DYNAMIC</b>					
Total Gate Charge	(VDS = 48 V, VGS = 10 V, ID = 5 A)	Qg	-	39.5	-
Gate to Source Charge		Qgs	-	5.35	-
Gate to Drain Charge		Qgd	-	11.5	-
Turn-on Delay Time	(VDD = 30 V, VGS = 10 V, RG = 6 Ω, ID = 1 A, RL = 30 Ω)	td(on)	-	13.7	-
Rise Time		tr	-	10.3	-
Turn-Off Delay Time		td(off)	-	58	-
Fall Time		tf	-	72	-
Input Capacitance	(VDS = 25 V, VGS = 0 V, F = 1MHz)	Ciss	-	2005	-
Output Capacitance		Coss	-	770	-
Reverse Transfer Capacitance		Crss	-	89	-
Diode Forward Voltage (VGS = 0V, IS = 1A, TJ = 25°C)	VSD	-	-	1	V
Continuous Source Current (VG = VD = 0V, Force Current)	IS	-	-	18	A
Pulsed Source Current (VG = VD = 0V, Force Current)	ISM	-	-	72	A

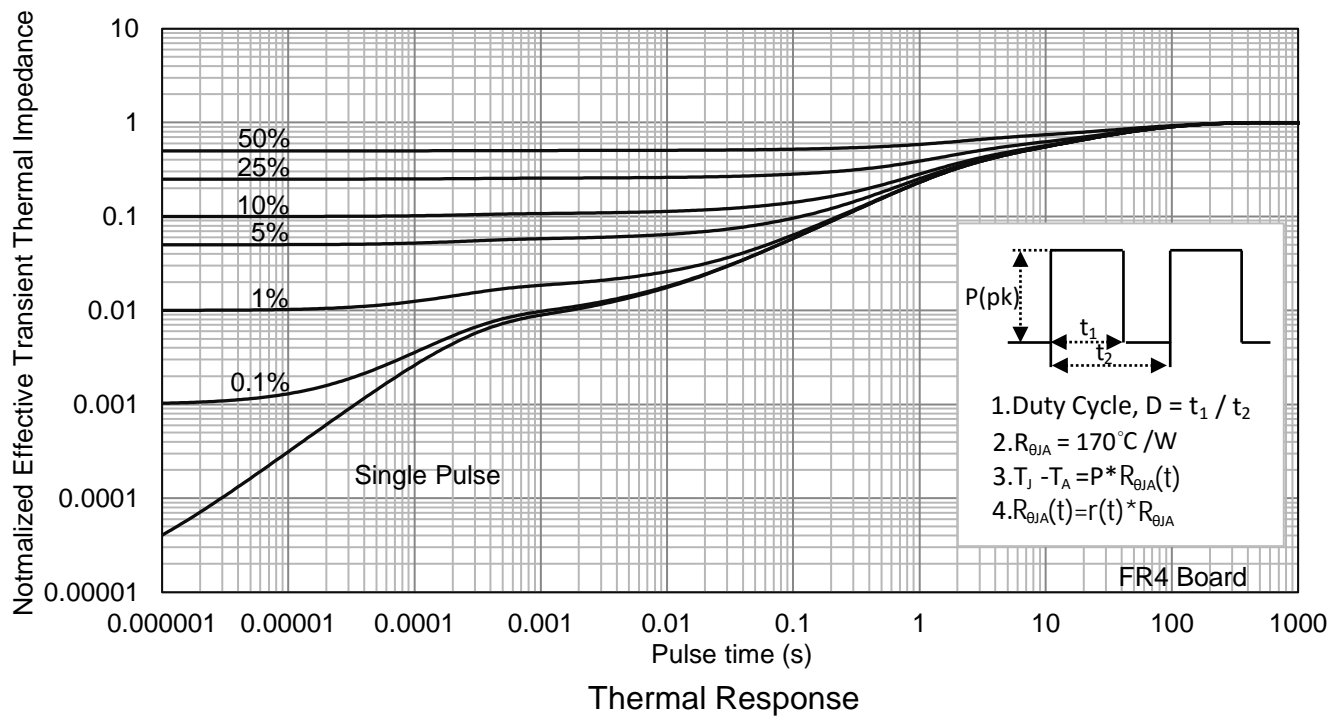
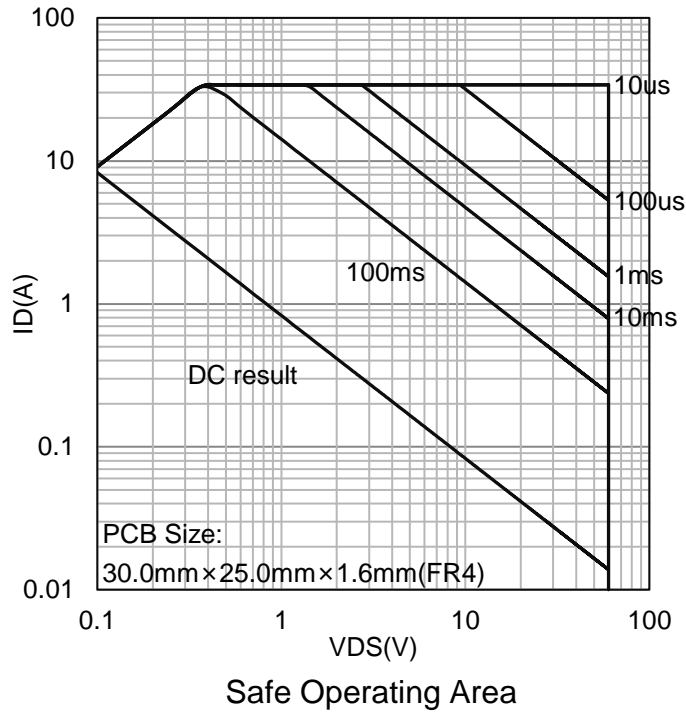
**7. ELECTRICAL CHARACTERISTICS CURVES**



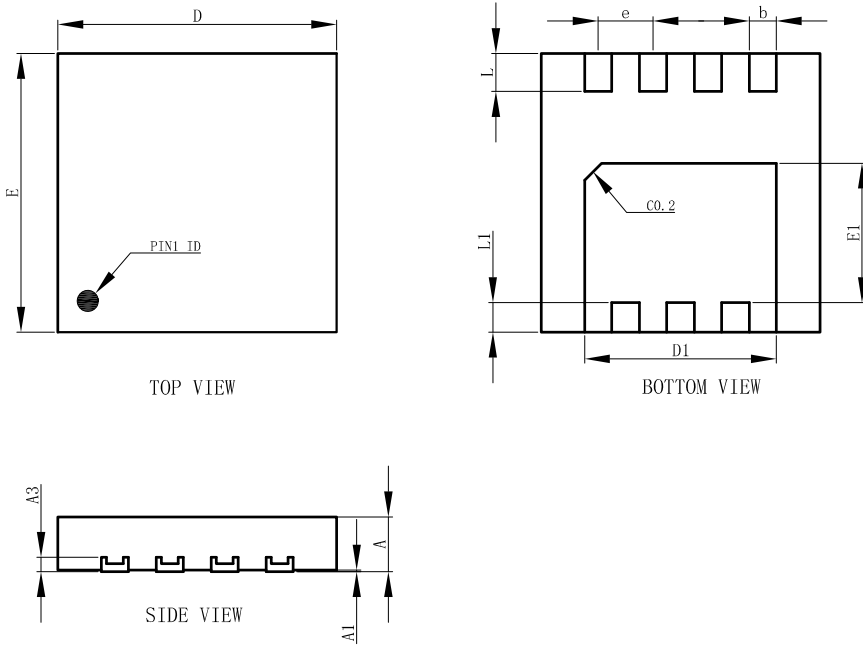
**7.ELECTRICAL CHARACTERISTICS CURVES(Con.)**



### 7. ELECTRICAL CHARACTERISTICS CURVES(Con.)

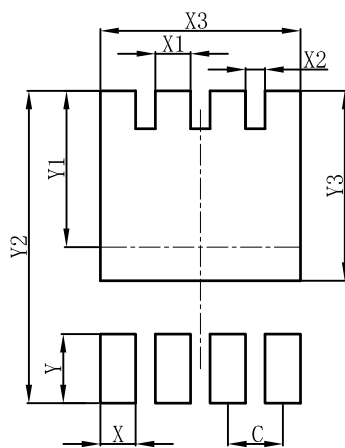


### 8. OUTLINE AND DIMENSIONS



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	
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

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