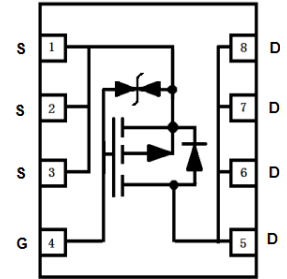


LPB8917DT0AG

P-Channel 150-V (D-S) MOSFET



DFN3333-8A



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

- Load Switches
- DC/DC Conversion
- Motor Drives

3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LPB8917DT0AG	A17	2000/Tape&Reel

4. MAXIMUM RATINGS(Ta = 25°C)

Parameter		Symbol	Limits	Unit
Drain-Source Voltage		VDS	-150	V
Gate-Source Voltage		VGS	±20	
Continuous Drain Current (Note1)	TA = 25°C	ID	-3	A
	TA = 70°C		-1.8	
Pulsed Drain Current (Note2)		IDM	-12	
Continuous Source Current (Diode Conduction) (Note1)		IS	-0.5	
Avalanche Current(L=0.1mH)		IAS	-8	
Avalanche Energy(L=0.1mH)		EAS	9	
Power Dissipation (Note1)	TA = 25°C	PD	2.4	W
	TA = 70°C		1.6	
Operating Junction and Storage Temperature Range		TJ,Tstg	-55~+150	°C

5. THERMAL CHARACTERISTICS

Parameter		Symbol	Limits	Unit
Maximum Junction-to-Ambient (Note1)	t ≤ 10 s	RθJA	45	°C/W
	Steady State		95	

- 1.Surface Mounted on 1" x 1" FR4 Board.
- 2.Pulse width limited by maximum junction temperature

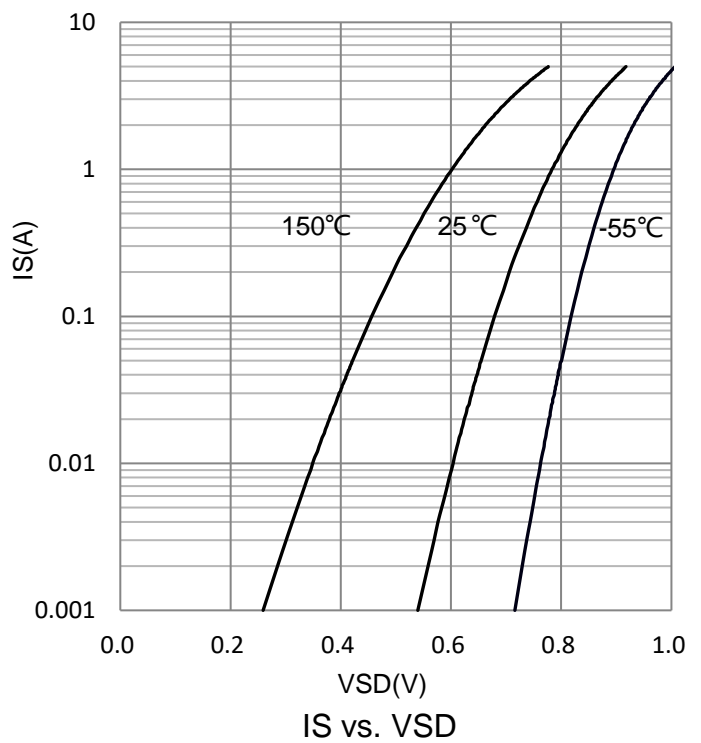
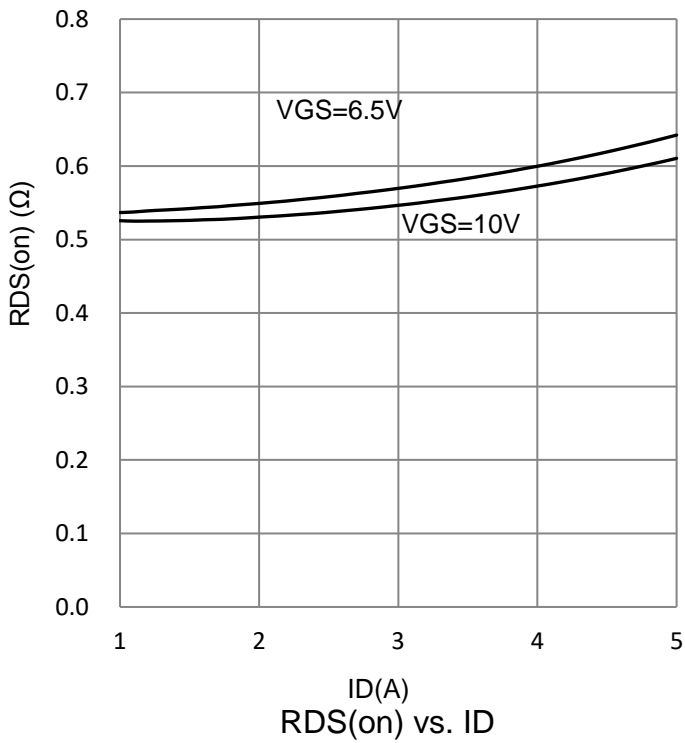
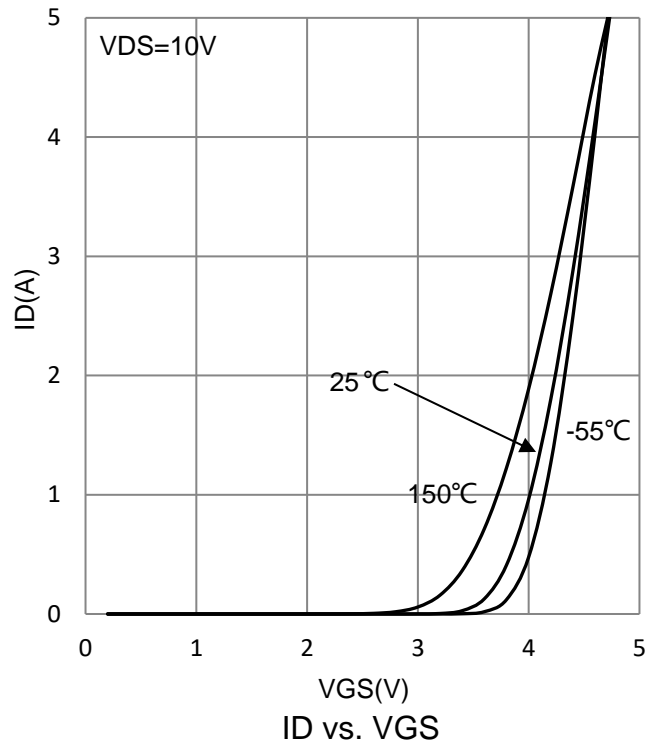
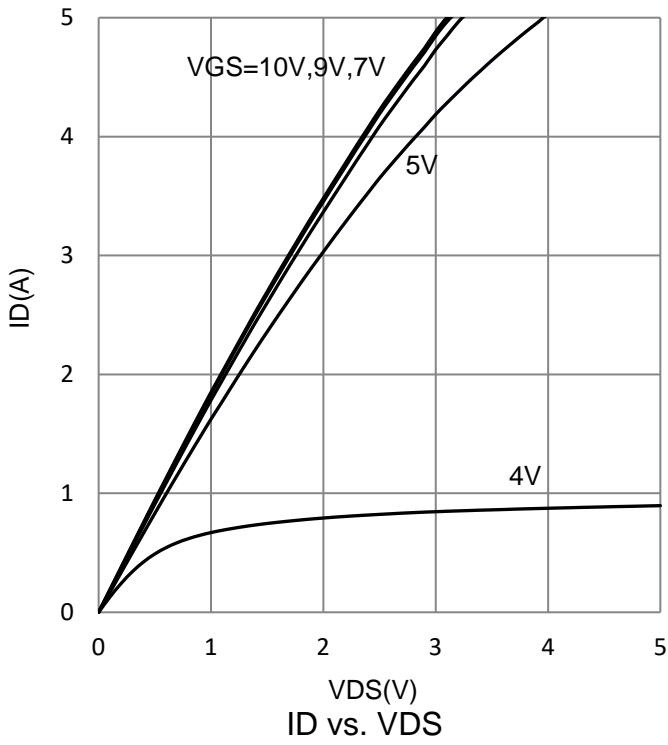
6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit	
Static						
Drain-Source Breakdown Voltage (VGS = 0, ID = -250μA)	VBRDSS	-150	-	-	V	
Gate Threshold Voltage (VDS =VGS , ID =-250μA)	VGS(th)	-2	-	-4	V	
Gate Leakage Current (VDS =0V, VGS =±20V)	IGSS	-	-	±100	nA	
Zero Gate Voltage Drain Current (VDS = -120 V, VGS = 0 V) (VDS = -120 V, VGS = 0 V, TJ = 55°C)	IDSS	-	-	-1 -10	μA	
Drain-Source On-Resistance(Note 3) (VGS = -10 V, ID = -3 A) (VGS = -6.5 V, ID = -2 A)	RDS(ON)	-	-	0.75 0.9	Ω	
Diode Forward Voltage (Note 3) (IS = -2.1 A, VGS = 0 V)	VSD	-	-0.83	-	V	
Dynamic(Note 4)						
Total Gate Charge	(VDS=-30V, VGS=-10V, ID=-4A)	Qg	-	10	-	nC
Gate-Source Charge		Qgs	-	2.8	-	
Gate-Drain Charge		Qgd	-	2.7	-	
Turn-On Delay Time	(VDS = -30 V, RL = 7.5 Ω, ID = -4 A, VGEN = -10 V, RGEN = 6 Ω)	td(on)	-	7	-	ns
Rise Time		tr	-	5	-	
Turn-Off Delay Time		td(off)	-	37	-	
Fall Time		tf	-	14	-	
Input Capacitance	(VDS = -15 V, VGS = 0 V, f = 1 MHz)	Ciss	-	659	-	pF
Output Capacitance		Coss	-	40	-	
Reverse Transfer Capacitance		Crss	-	30	-	
Gate-Resistance (VDS=0V, VGS=0V, f=1MHz)	Rg	-	3	-	Ω	

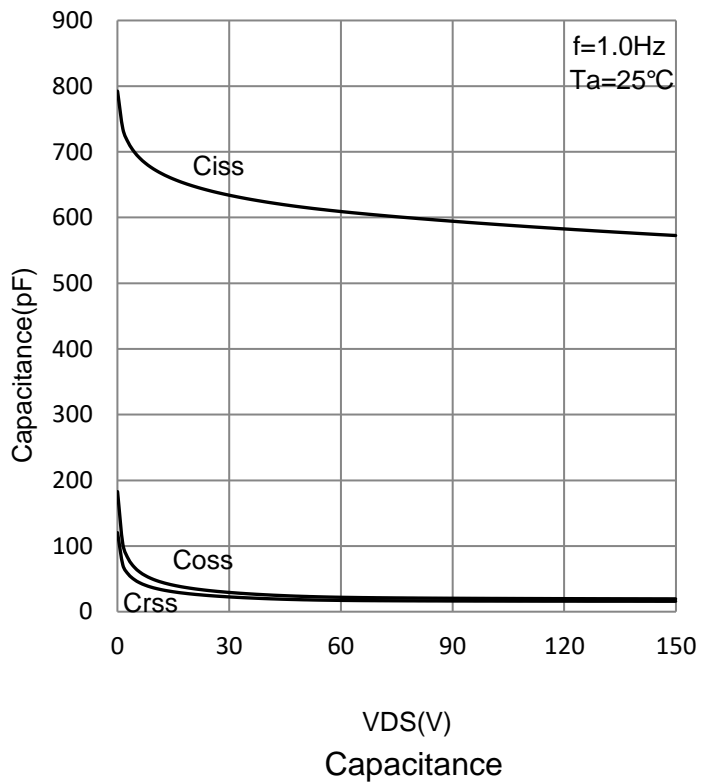
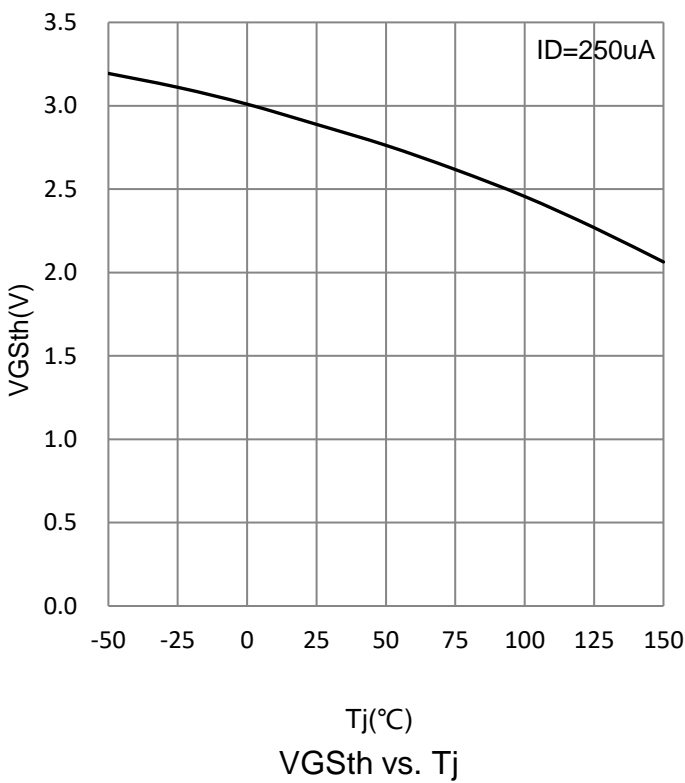
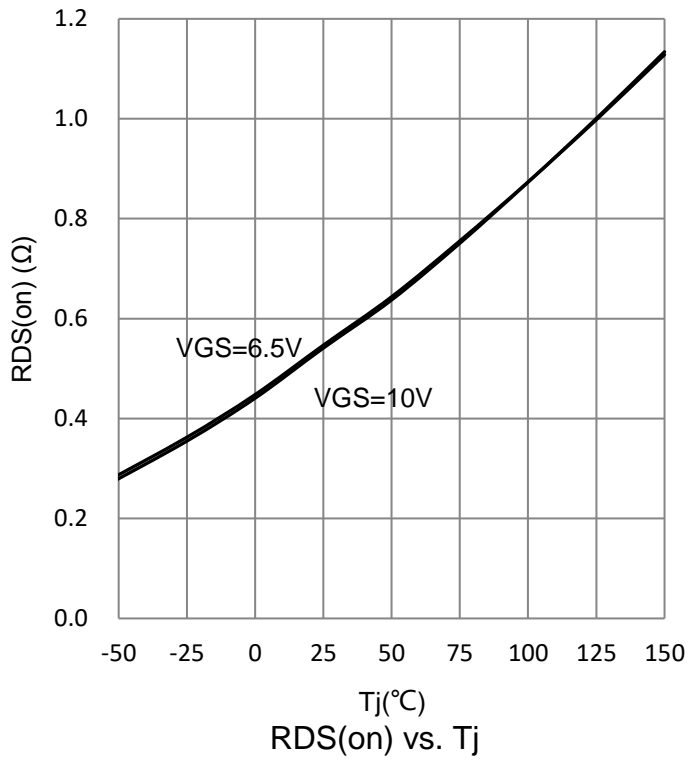
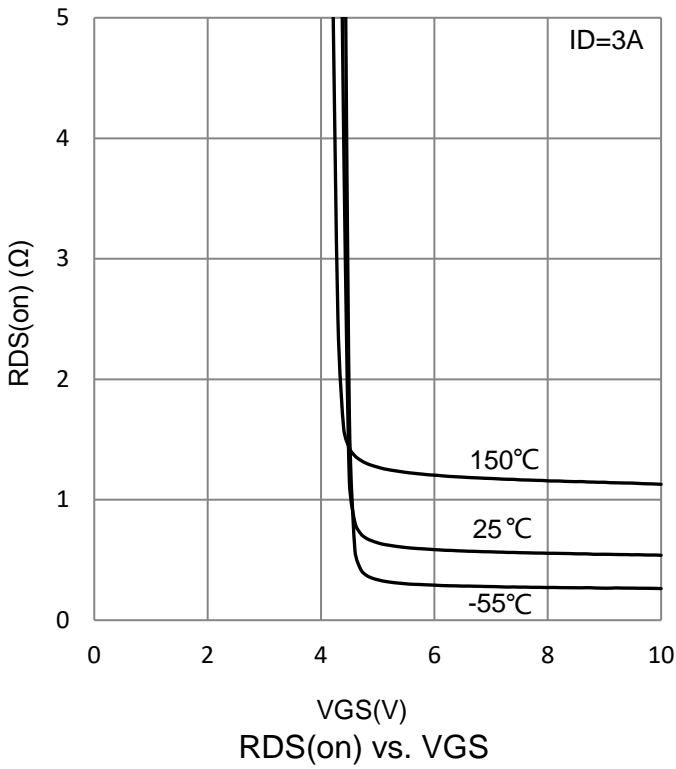
3. Pulse test: PW ≤ 300us duty cycle ≤ 2%.

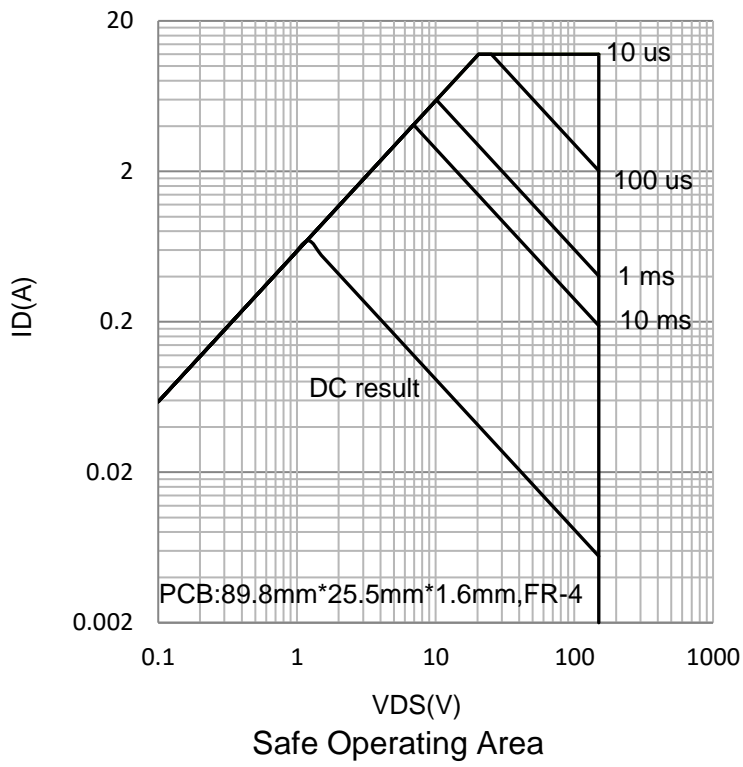
4. Guaranteed by design, not subject to production testing.

7.ELECTRICAL CHARACTERISTICS CURVES



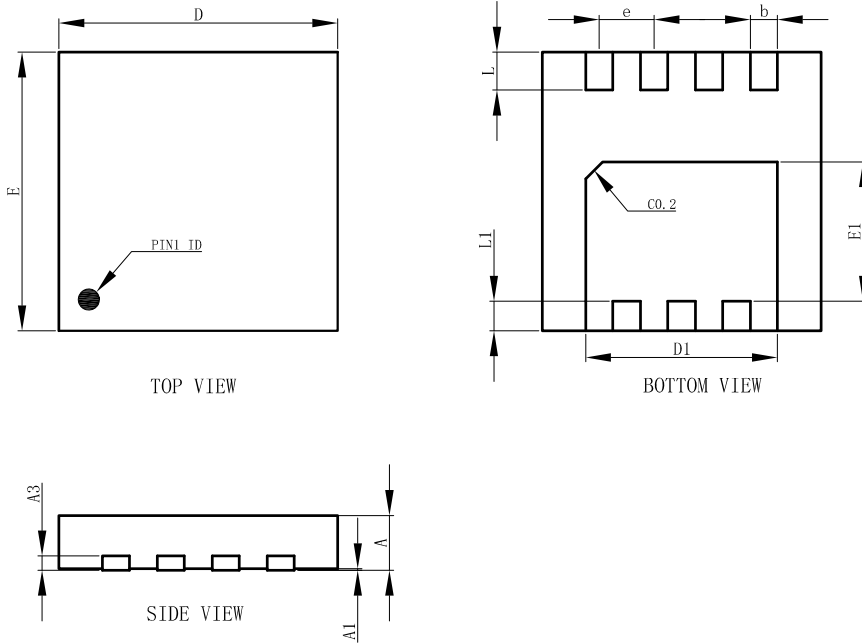
7.ELECTRICAL CHARACTERISTICS CURVES



7.ELECTRICAL CHARACTERISTICS CURVES(Con.)

8. OUTLINE AND DIMENSIONS

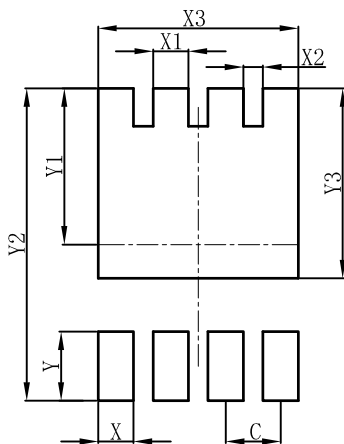
DFN3333-8A



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