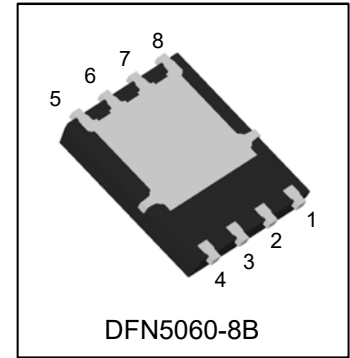


P73035D

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

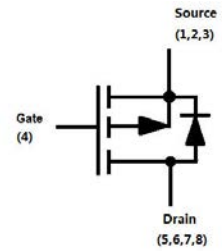
1. FEATURES

- 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 RESISTOR VALUES

Device	Marking	Shipping
P73035D	LP73035	3000/Tape&Reel

4. MAXIMUM RATINGS(Ta = 25°C)

Parameter		Symbol	Limits	Unit
Drain-to-Source Voltage		VDSS	-30	V
Gate-to-Source Voltage		VGS	±20	V
Avalanche Current		IAS	55	A
Avalanche energy L=0.1mH		EAS	151.25	mJ
Continuous Drain Current(Note 1)	TA =25°C	ID	-30	A
	TA =70°C		-23	
	TC =25°C		-105	
	TC =70°C		-80	
Pulsed Drain Current (Note 2)		IDM	-120	
Power Dissipation(Note 1)	TA =25°C	PD	5	W
	TC =25°C		50	
Operating Junction Temperature		TJ	-55 ~+150	°C
Storage Temperature Range		Tstg	-55 ~+150	

5. THERMAL CHARACTERISTICS

Parameter	Symbol	Max	Unit
Junction-to-Ambient(Note 1)	RθJA	50	°C/W
Junction-to-Case	RθJC	2.5	

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



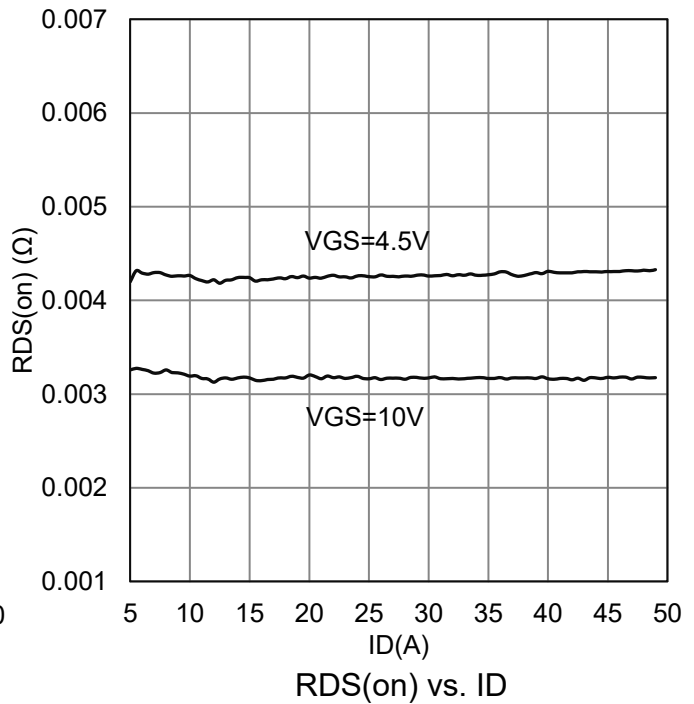
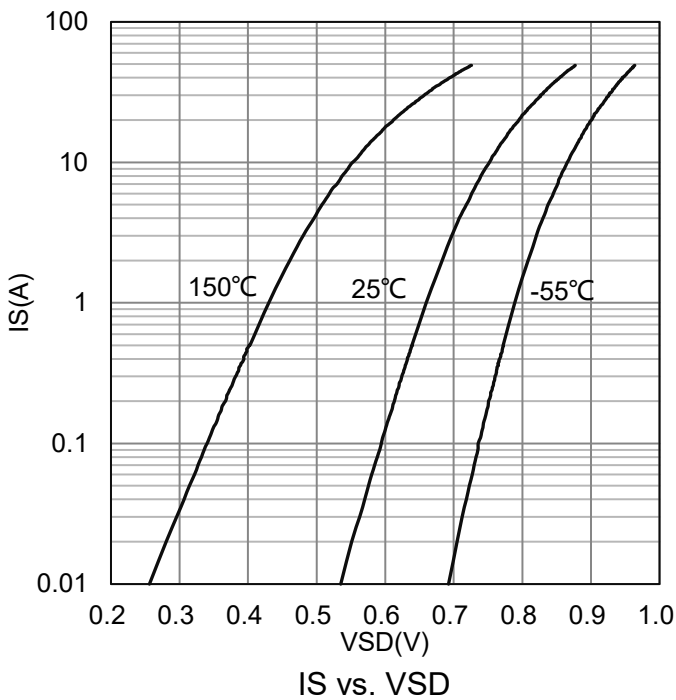
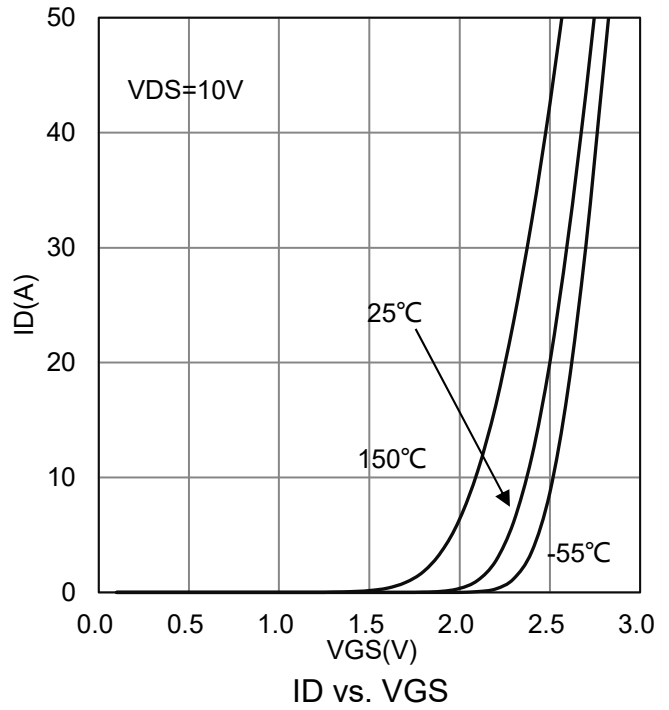
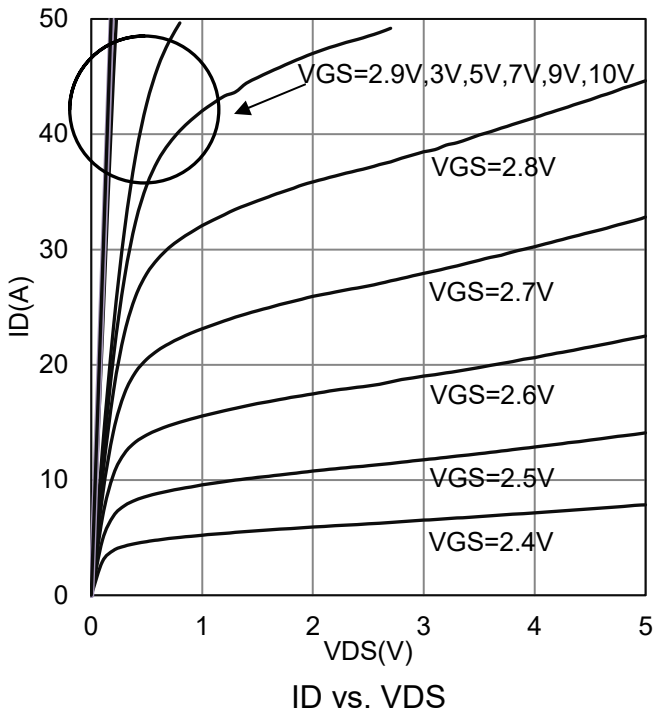
6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Static					
Drain-Source Breakdown Voltage (VGS=0 , ID = -250 μ A)	V(BR)DSS	-30	-	-	V
Gate-Source Threshold Voltage (VDS = VGS , ID = -250 μ A)	VGS(th)	-1	-	-2.5	V
Gate-Body Leakage (VDS = 0 V, VGS = \pm 20 V)	IGSS	-	-	\pm 100	nA
Zero Gate Voltage Drain Current (VDS = -30 V, VGS = 0 V)	IDSS	-	-	-1	μ A
Drain-Source On-Resistance(Note 3) (VGS = -10 V, ID = -15 A) (VGS = -4.5 V, ID = -15 A)	RDS(on)	-	-	3.7 5	m Ω
Diode Forward Voltage(Note 3) (IS = -2A, VGS = 0 V)	VSD	-	-	-1.2	V
Dynamic(Note 4)					
Total Gate Charge	(VDS = -24 V, VGS = -10 V, ID = -10 A)	Qg	-	166	nC
Gate-Source Charge		Qgs	-	21	
Gate-Drain Charge		Qgd	-	35	
Input Capacitance	(VDS = -25 V, VGS = 0 V, f = 1 MHz)	Ciss	-	8522	pF
Output Capacitance		Coss	-	993	
Reverse Transfer Capacitance		Crss	-	770	
Turn-On Delay Time	(VDS=-15 V, RL=1.5 Ω , ID=- 10A, VGEN=-10 V, RGEN=5 Ω)	td(on)	-	17	ns
Rise Time		tr	-	61	
Turn-Off Delay Time		td(off)	-	200	
Fall Time		tf	-	113	
Gate-Resistance (VDS=0V, VGS=0V, f=1.0MHz)	Rg	-	3.6	-	Ω

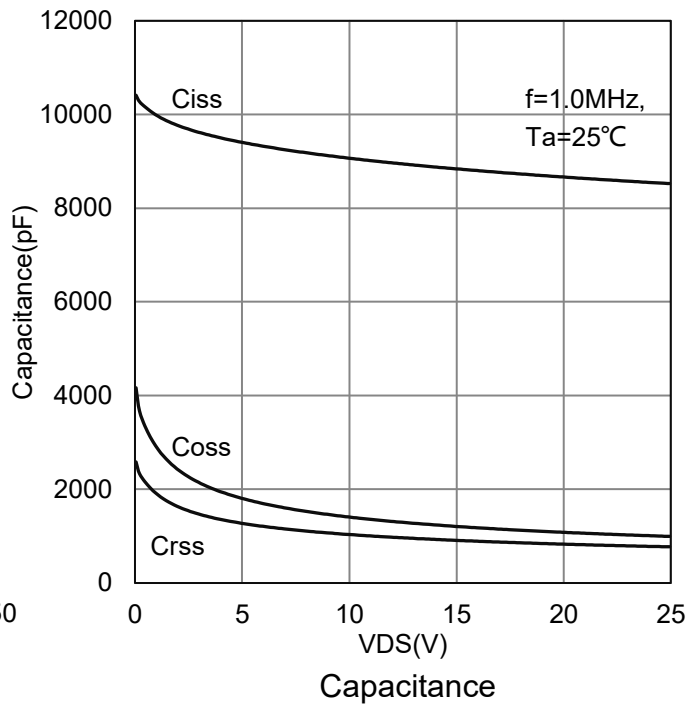
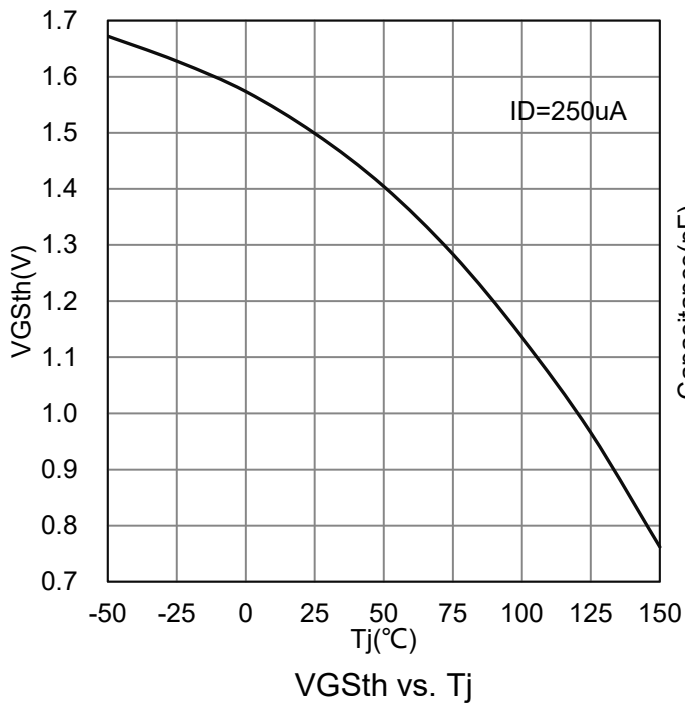
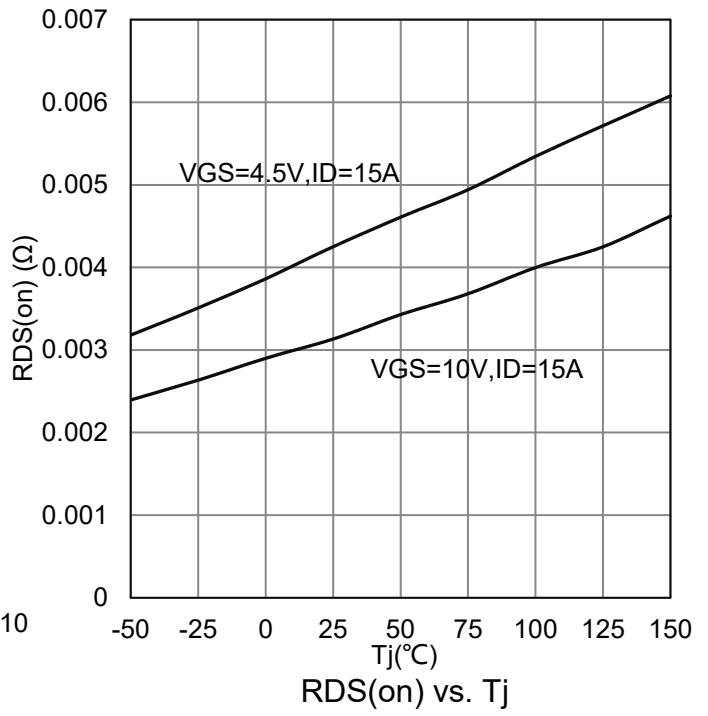
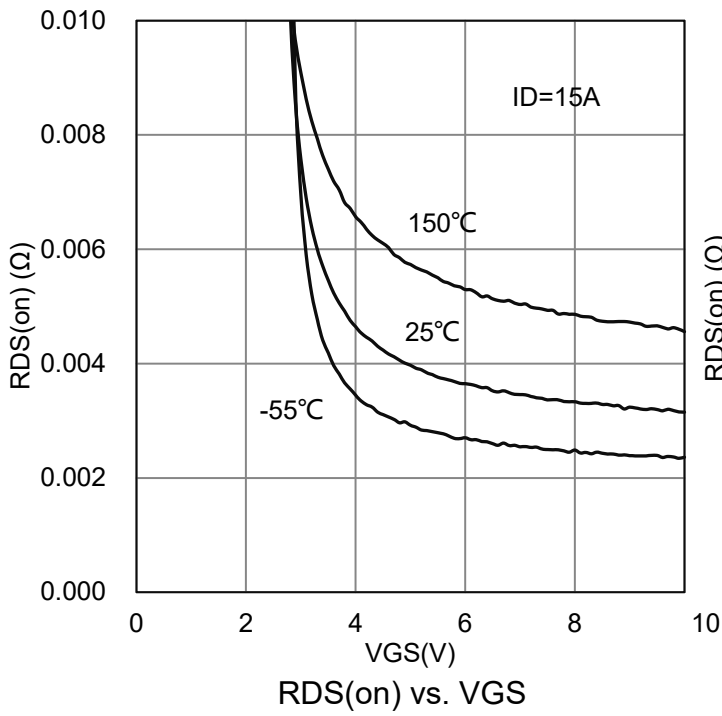
3. Pulse test: PW \leq 300 μ s duty cycle \leq 2%.



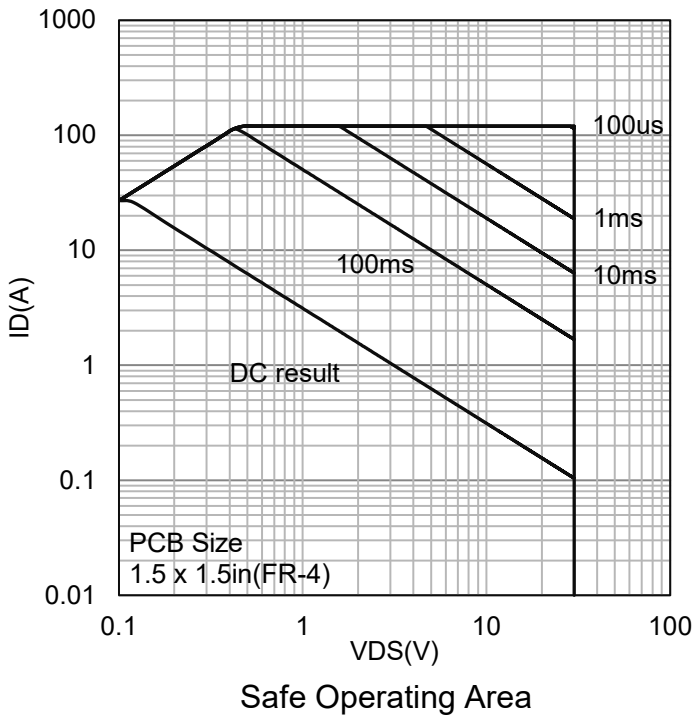
7. ELECTRICAL CHARACTERISTICS CURVES

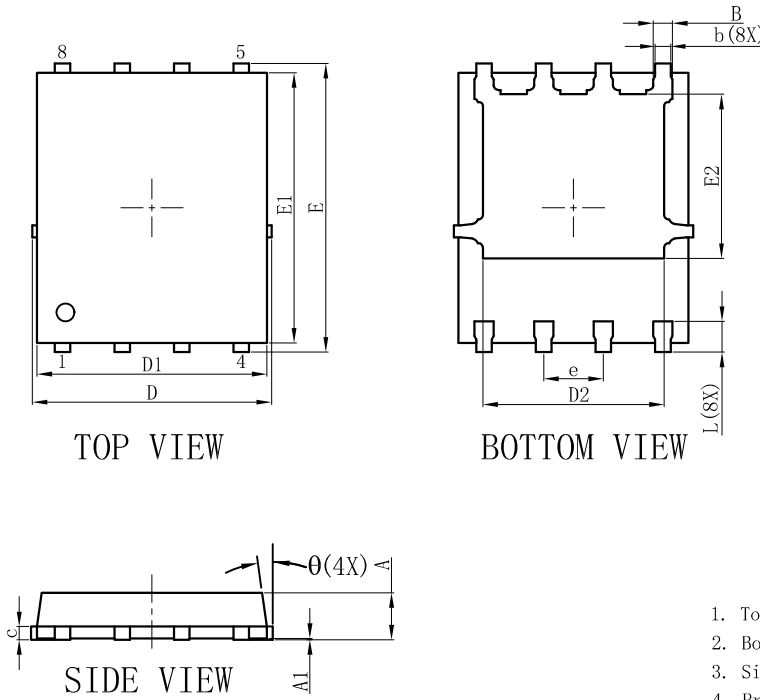


7. ELECTRICAL CHARACTERISTICS CURVES(Con.)



7. ELECTRICAL CHARACTERISTICS CURVES(Con.)

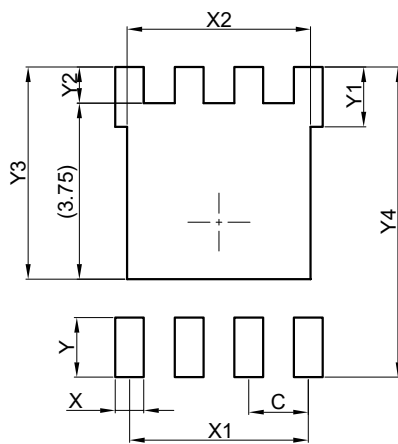


7. OUTLINE AND DIMENSIONS
DFN5060-8B


DFN5060-8B			
DIM	MIN	NOR	MAX
A	0.90	1.00	1.10
A1	0.00	0.02	0.05
E	6.00	6.15	6.30
E1	5.66	5.76	5.86
E2	3.40	3.50	3.60
D	4.95	5.10	5.25
D1	4.80	4.90	5.00
D2	3.76	3.86	3.96
b	0.30	0.35	0.40
B	0.36	0.41	0.46
L	0.56	0.66	0.76
e	1.27BSC		
c	0.254REF.		
θ	0°	-	12°
All Dimensions in mm			

GENERAL NOTES

1. Top package surface finish $Ra0.4 \pm 0.2\mu m$
2. Bottom package surface finish $Ra0.7 \pm 0.2\mu m$
3. Side package surface finish $Ra0.4 \pm 0.2\mu m$
4. Protrusion or Gate Burrs shall not exceed 0.05mm per side.
5. Offcenter Max0.038mm; Mismatch Max 0.038mm.

8. SOLDERING FOOTPRINT


DFN5060-8B	
DIM	(mm)
C	1.27
X	0.61
X1	3.81
X2	3.91
Y	1.27
Y1	1.27
Y2	0.77
Y3	4.52
Y4	6.61

