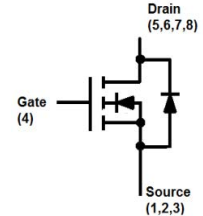
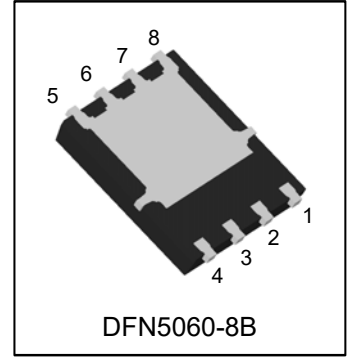


N7464D

60V N-Channel MOSFET

1. FEATURES

- Improved dv/dt capability
- Fast switching
- 100% EAS Guaranteed
- We declare that the material of product compliance with RoHS requirements and Halogen Free.



2. APPLICATIONS

- Networking
- Load Switch
- LED applications

3. DEVICE MARKING AND RESISTOR VALUES

Device	Marking	Shipping
N7464D	LN7464	3000/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	TC=25°C	ID	140	A
	TC=100°C		88	A
Pulsed Drain Current(Note 1)		IDM	560	A
Avalanche Current(L=0.1mH)		IAS	52	A
Avalanche Energy(L=0.1mH)		EAS	135.2	mJ
Power Dissipation TC=25°C		PD	110	W
Derate above 25°C			0.89	W/°C
Operating Junction and Storage Temperature Range		Tj/Tstg	-50~+150	°C

1.Surface Mounted on 1" x 1" FR4 Board.

5. THERMAL CHARACTERISTICS

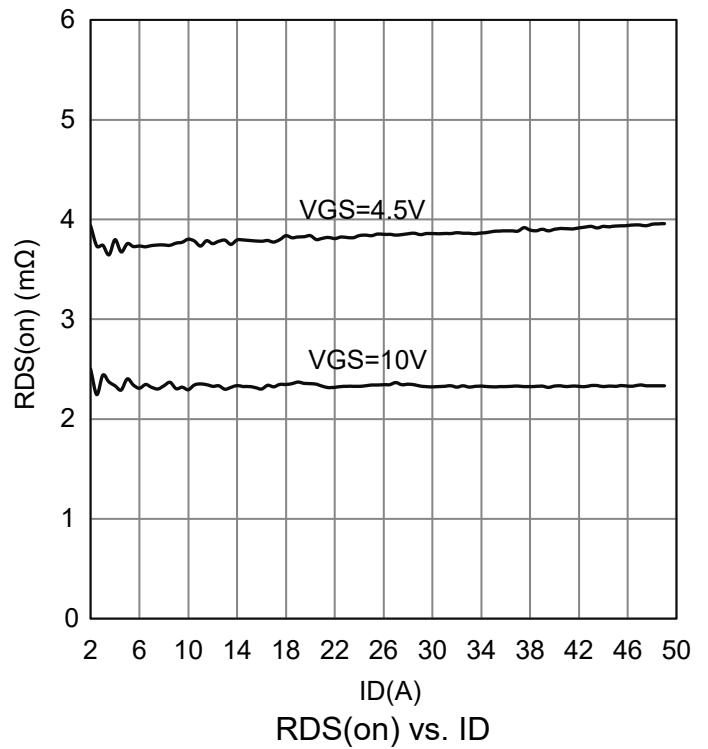
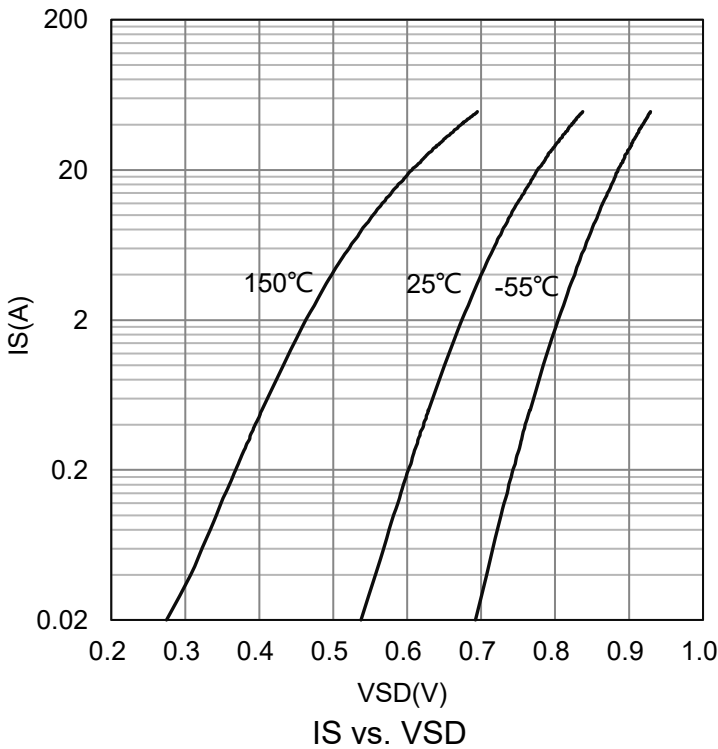
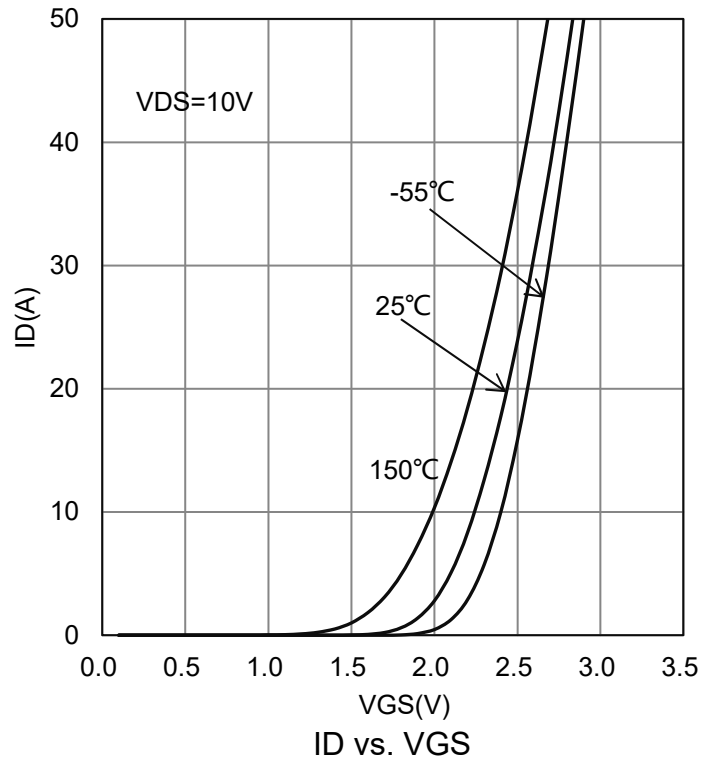
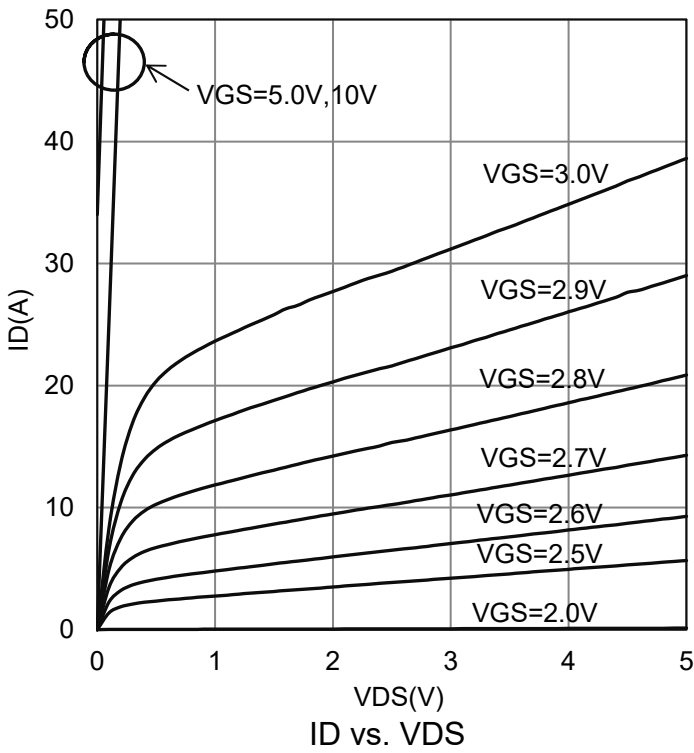
Parameter		Symbol	Limits	Unit
Maximum Junction-to-Ambient	t ≤ 10s	RθJA	25	°C/W
	Steady State		65	
Maximum Junction-to-Case		RθJC	3.5	°C/W

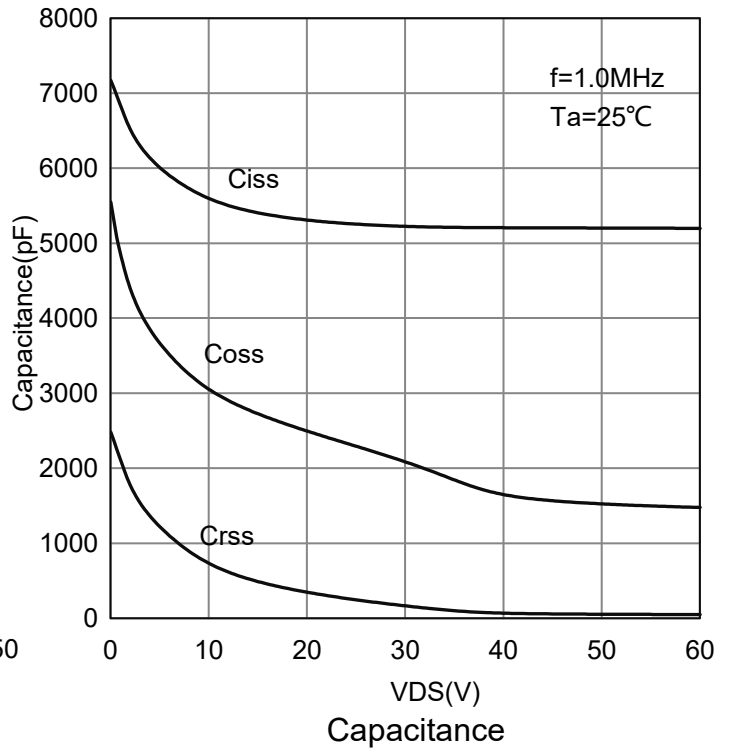
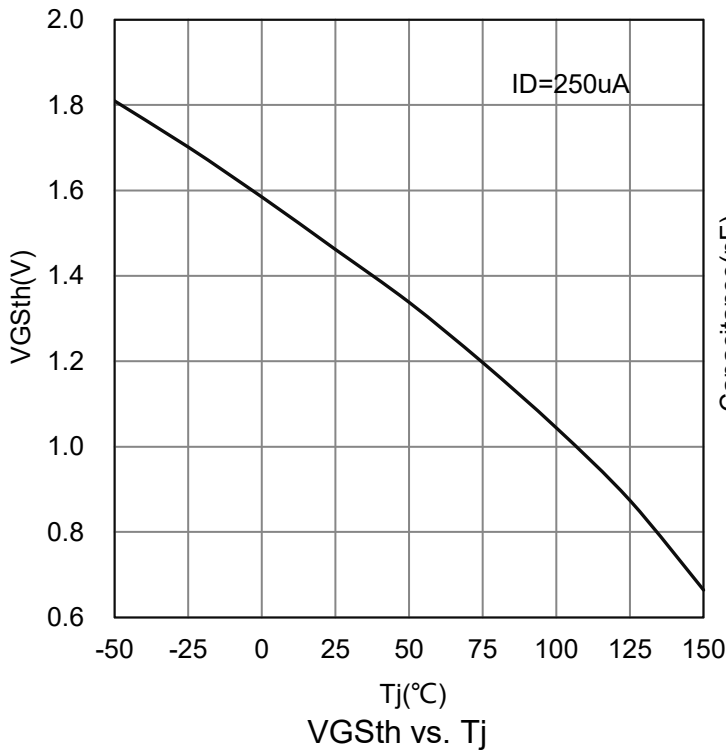
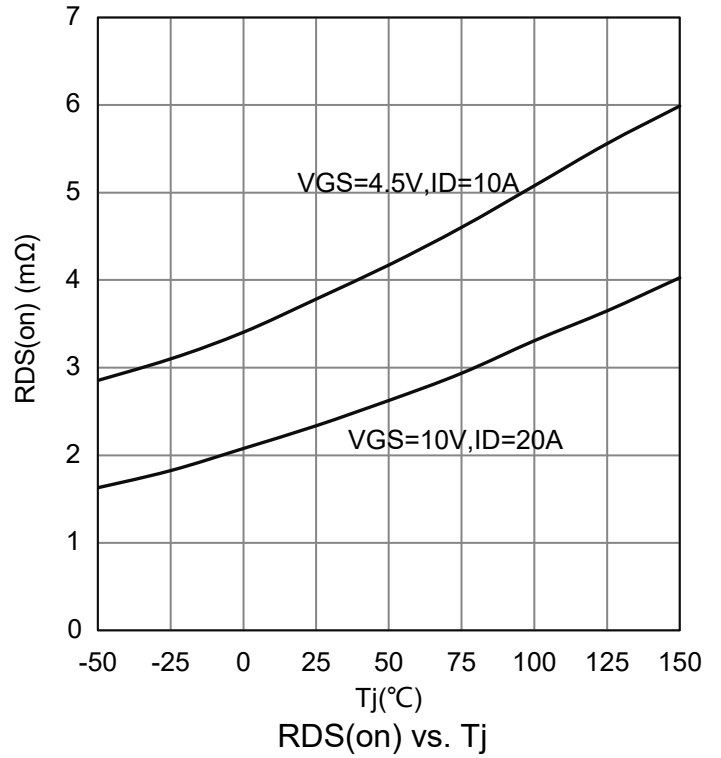
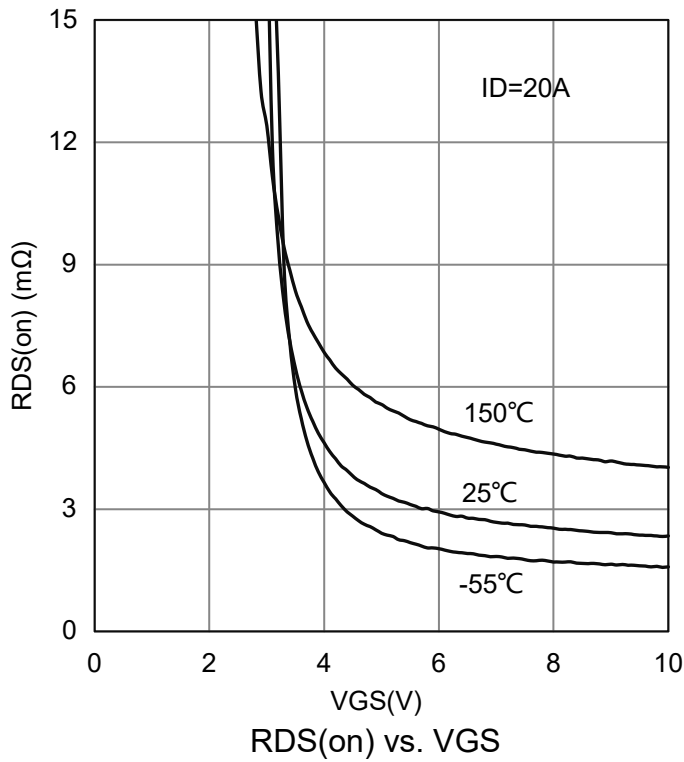


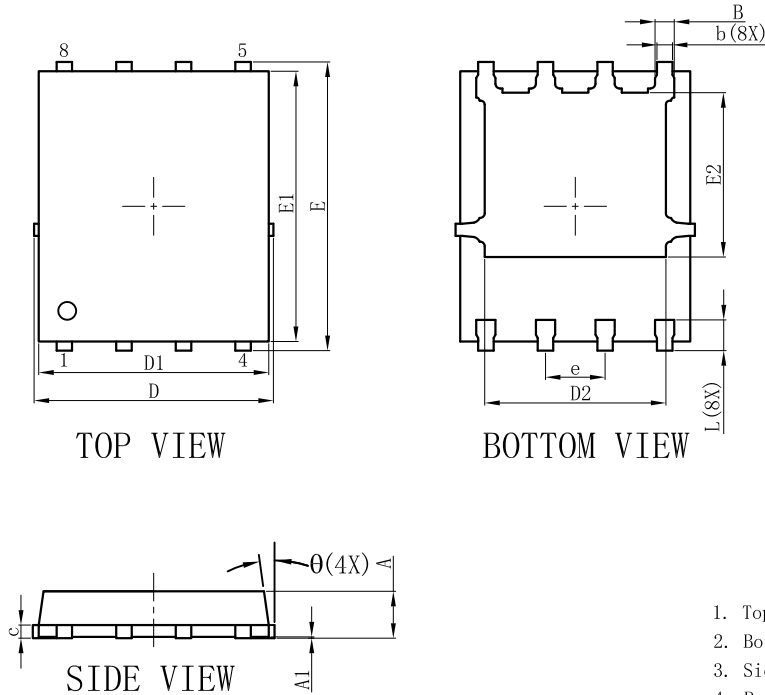
6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Drain to Source Breakdown Voltage (VGS =0V, ID =250μA)	VDSS	60	-	-	V
Drain-to-Source Leakage Current (VDS =60V, VGS =0V)	IDSS	-	-	1	μA
Gate-Body leakage current (VDS =0V, VGS = 20V)	IGSSF	-	-	100	nA
Gate-Body leakage current (VDS =0V, VGS = -12V)	IGSSR	-	-	-100	nA
Gate Threshold Voltage (VDS = VGS , ID = 250μA)	VGS(th)	1	-	2.5	V
Drain-to-Source On-Resistance (VGS =10V, ID =20A) (VGS =4.5V, ID =10A)	RDS(ON)	- -	- -	3 5.5	mΩ
Total Gate Charge(VGS=4.5V)	(VDS =30V, VGS =10V, ID =50A)	Qg	-	55	nC
Total Gate Charge(VGS=10V)		Qg	-	102	
Gate to Source Charge		Qgs	-	16.4	
Gate to Drain Charge		Qgd	-	28	
Turn-on Delay Time	(VDD =15V, VGS =10V, RG =3.3 Ω, ID =1A)	td(on)	-	19	nS
Rise Time		tr	-	12	
Turn-Off Delay Time		td(off)	-	62	
Fall Time		tf	-	130	
Input Capacitance	(VDS =30V, VGS =0V, f=1MHz)	Ciss	-	5224	pF
Output Capacitance		Coss	-	2084	
Reverse Transfer Capacitance		Crss	-	165	
Gate Resistance (VDS=0V, VGS=0V, f=1.0MHz)	Rg	-	1.5	-	Ω



7.ELECTRICAL CHARACTERISTICS CURVES


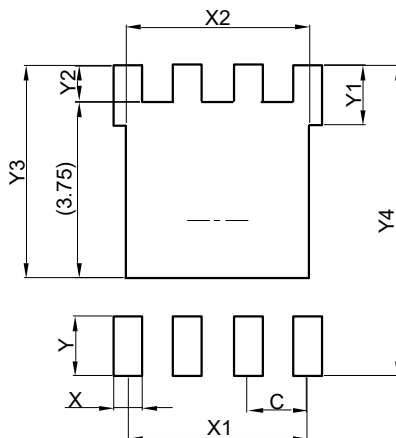
7.ELECTRICAL CHARACTERISTICS CURVES(Con.)


8.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±0.2um
2. Bottom package surface finish Ra0.7±0.2um
3. Side package surface finish Ra0.4±0.2um
4. Protrusion or Gate Burrs shall not exceed 0.05mm per side.
5. Offcenter Max0.038mm; Mismatch Max 0.038mm.

9.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

