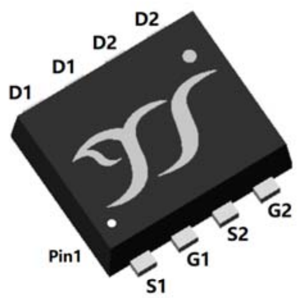
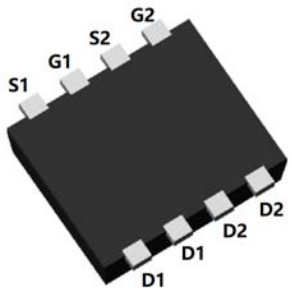
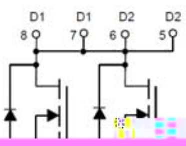


Top View



Bottom View

PDFN3030-8L



- V_{DS} 20V
- I_D 7A
- $R_{DS(ON)}$(at V_{GS}=4.5V) 17mΩ
- $R_{DS(ON)}$(at V_{GS}=2.5V) 22mΩ
- $R_{DS(ON)}$(at V_{GS}=1.8V) 39mΩ
- ESD Protected Up to 2KV (HBM)

A

- Trench Power LV MOSFET technology
- High Speed switching
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free

- PWM application
- Load switch

■ [redacted]=25 unless otherwise noted)

Drain-source Voltage		V_{DS}	20	V
Gate-source Voltage		[redacted]	±10	V
Drain Current	T_A=2[redacted]	I_D	7	A
	T_A=100		4	
Pulsed Drain Current A		I_{DM}	56	A
Total Power Dissipation B	T_A=25	P_D	1.25	W
	T_A=100		0.5	
Junction and Storage Temperature Range		T_J ,T_{STG}	-55 +150	

■

Thermal Resista m p iJ a κ .	Miis	ξ " E Ő	ξ ﭺ ~ᛚ	r10D	

■ C) (Example)

YJUD3416A	F1	QD3416A	3000	30000	120000	7“ reel

■ (T_J=25 unless otherwise noted)

Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}= 0V, I_D=250μA	20	-	-	V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=20V, V_{GS}=0V	-	-	1	μA
		V_{DS}=20V, V_{GS}=0V, Tj=150	-	-	100	
Gate-Body Leakage Current	I_{GSS}	V_{GS}= ±10V, V_{DS}=0V	-	-	±10	μA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}= V_{GS}, I_D=250μA	0.45	0.7	1	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=4.5V, I_D=7A	-	13	17	mΩ
		V_{GS}=2.5V, I_D=4A	-	16	22	
		V_{GS}=1.8V, I_D=1.5A	-	25	39	
Diode Forward Voltage	V_{SD}	I_S=7A, V_{GS}=0V	-	-	1.2	V
Gate resistance	R_G	f=1MHz	-	2.5	-	Ω
Maximum Body-Diode Continuous Current	I_S		-	-	7	A
Input Capacitance	C_{iss}	V_{DS}=10V, V_{GS}=0V, f=1MHz	-	615	-	pF
Output Capacitance	C_{oss}		-	125	-	
Reverse Transfer Capacitance	C_{rss}		-	105	-	
Total Gate Charge	Q_g	V_{GS}=4.5V, V_{DS}=10V, I_D=7A	-	8.3	-	nC
Gate-Source Charge	Q_{gs}		-	1.9	-	
Gate-Drain Charge	Q_{gd}		-	2.2	-	
Reverse Recovery Charge	Q_{rr}	I_F=7A, di/dt=100A/us	-	5.3	-	nC
Reverse Recovery Time	t_{rr}		-	25.5	-	ns
Turn-on Delay Time	$t_{D(on)}$	V_{GS}=4.5V, V_{DD}=10V, I_D=7A R_{GEN}=3Ω	-	4	-	ns
Turn-on Rise Time	t_r		-	32	-	
Turn-off Delay Time	$t_{D(off)}$		-	19	-	
Turn-off fall Time	t_f		-	10	-	

A. Repetitive rating; pulse width limited by max. junction temperature.
B. P_d is based on max. junction temperature, using junction-ambient thermal resistance.
C. The value of RθJA is measured with the device mounted on 1 in 2 FR-4 board with 2oz. Copper, in a still air environment with T_a=25 ℃, The maximum allowed junction temperature of 150 . The value in any given application depends on the user's specific board design.

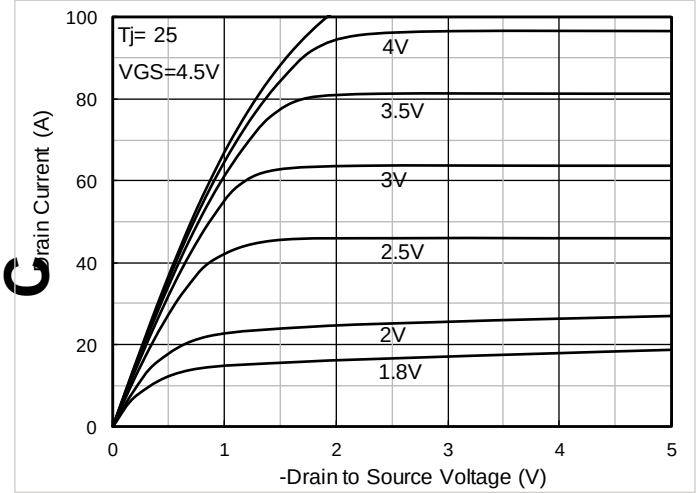


Figure 1. Output Characteristics

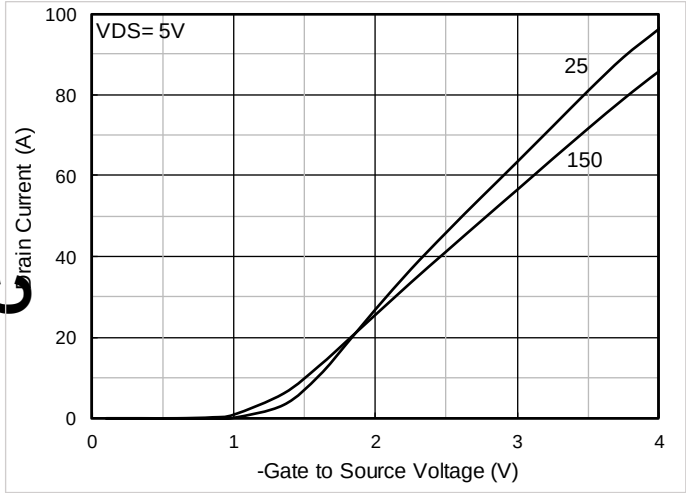
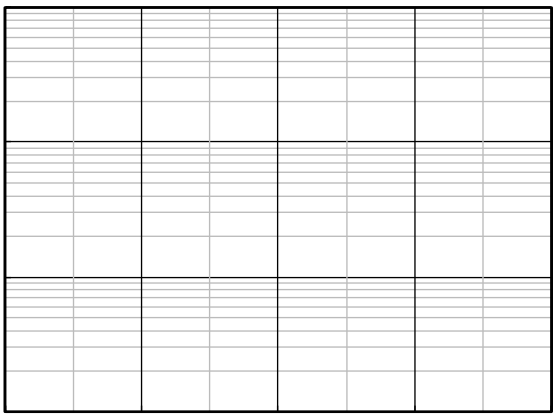
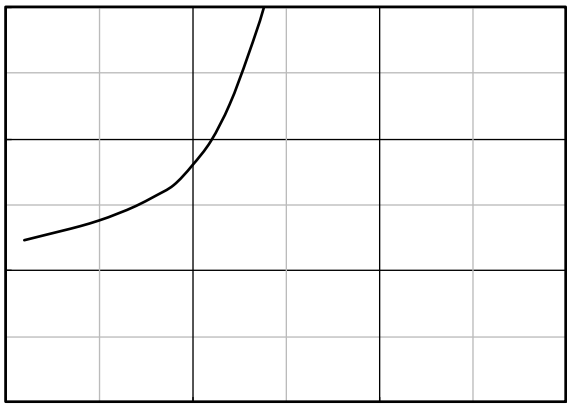
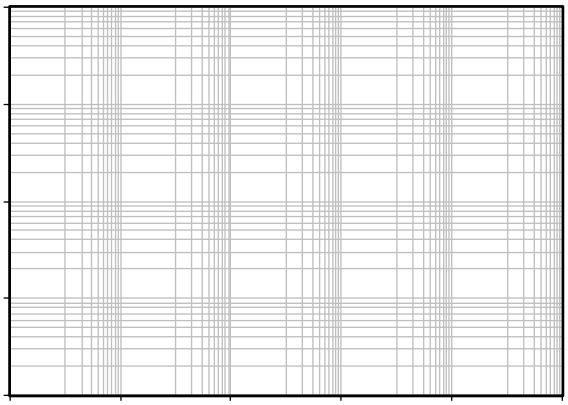
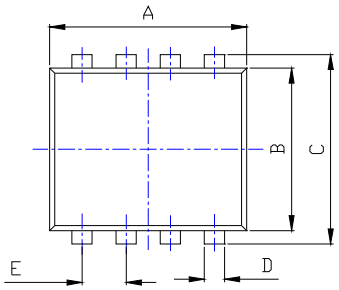


Figure 2. Transfer Characteristics

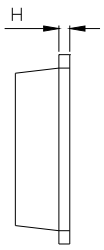




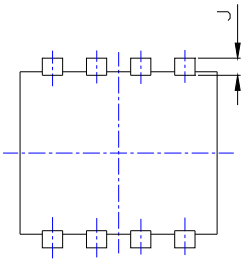




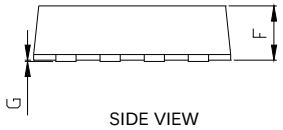
TOP VIEW



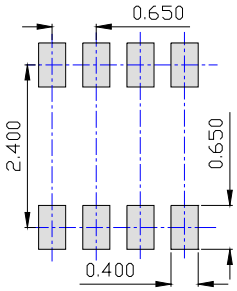
SIDE VIEW



BOTTOM VIEW



SIDE VIEW



SUGGESTED SOLDER PAD LAYOUT

UNIT mm

DIMENSIONS				
SYMBOL	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.108	0.120	2.750	3.050
B	0.089	0.100	2.250	2.550
C	0.104	0.116	2.650	2.950
D	0.008	0.016	0.200	0.400
E	0.026TYP		0.650TYP	
F	0.028	0.035	0.700	0.900
G	0.000	0.004	0.000	0.100
H	0.004	0.012	0.100	0.300
J	0.007	0.015	0.190	0.390

NOTE:
1.PACKAGE BODY SIZES EXCLUDE MOLD FLASH AND GATE BURRS.
2.TOLERANCE 0.1mm UNLESS OTHERWISE SPECIFIED.
3.THE PAD LAYOUT IS FOR REFERENCE PURPOSES ONLY.

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such impropera ! a