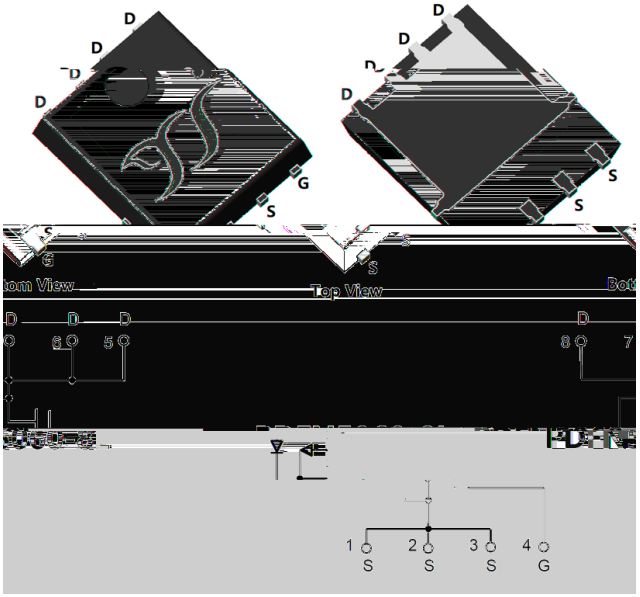
P-Channel Enhancement Mode Field Effect Transistor



Product Summary

V_{DS}	-40 V
I_D	-60 A
$R_{DS(ON)}$(at V_{GS}=-10V)	7.5 m
$R_{DS(ON)}$(at V_{GS}=-4.5V)	10.5 m

100% EAS Tested

100% V_{DS} Tested

General Description

Trench Power MOSFET technology

Low $R_{DS(on)}$ & FOM

Excellent stability and uniformity

Moisture Sensitivity Level 1

-0 Flammability Rating

alogen Free

Applications

Absolute Maximum Ratings (T_A=25 unless otherwise noted)

Parameter		Symbol	Limit	Unit
Drain-source Voltage		V_{DS}	-40	V
Gate-source Voltage		V_{GS}	±25	V
Drain Current	T_A=25℃	I_D	-14	A
	T_A=100℃		-9	
	T_C=25℃		-60	
	T_C =100℃		-38	
Pulsed Drain Current [A]		I_{DM}	-240	A
Avalanche energy [B]		EAS	400	mJ
Total Power Dissipation [C]	T_A=25℃	P_D	2.5	W
	T_A=100℃		1	
	T_C=25℃		83	
	T_C =100℃		33	
Junction and Storage Temperature Range		T_J ,T_{STG}	-55 +150	℃

Thermal resistance

Parameter		Symbol	Typ	Max	Units
Thermal Resistance Junction-to-Ambient [D]	Steady-State	R	40	50	℃/W
Thermal Resistance Junction-to-Case	Steady-State	R	1.2	1.5	

Ordering Information (Example)

PREFERED P/N	PACKING CODE	Marking	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YJG60P04A	F1	YJG60P04A	5000	10000	100000	13 reel

Typical Electrical and Thermal Characteristics Diagrams

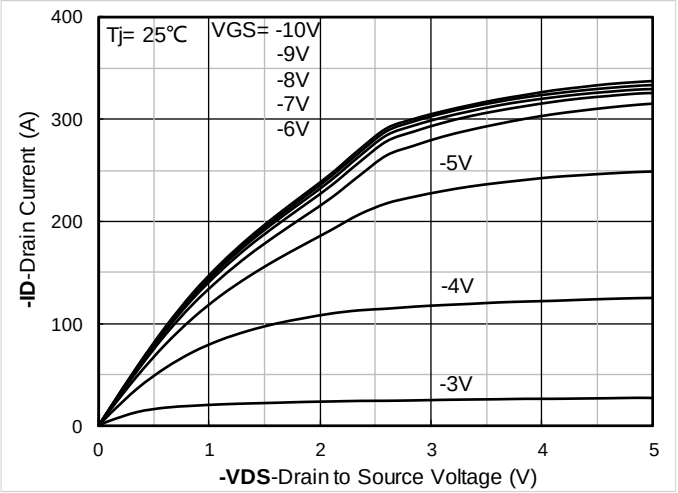


Figure 1. Output Characteristics

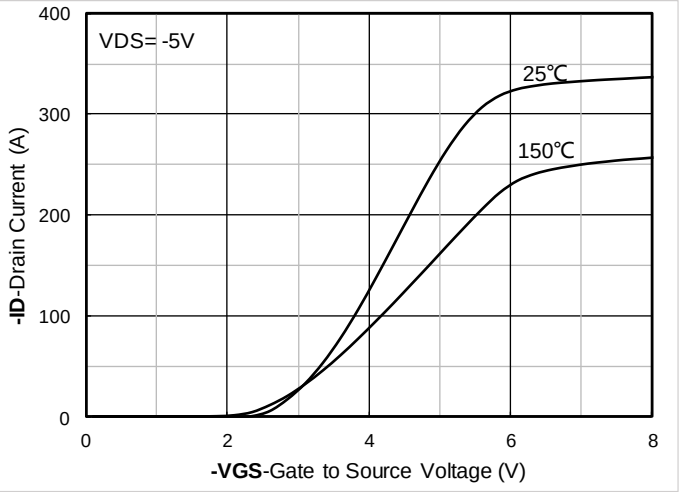


Figure 2. Transfer Characteristics

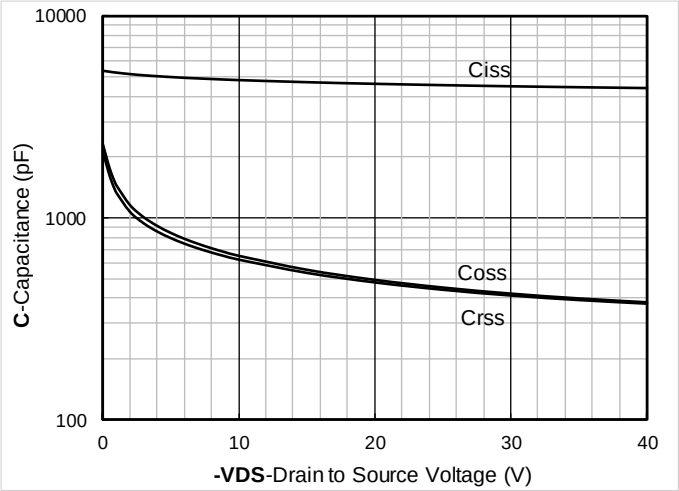


Figure 3. Capacitance Characteristics

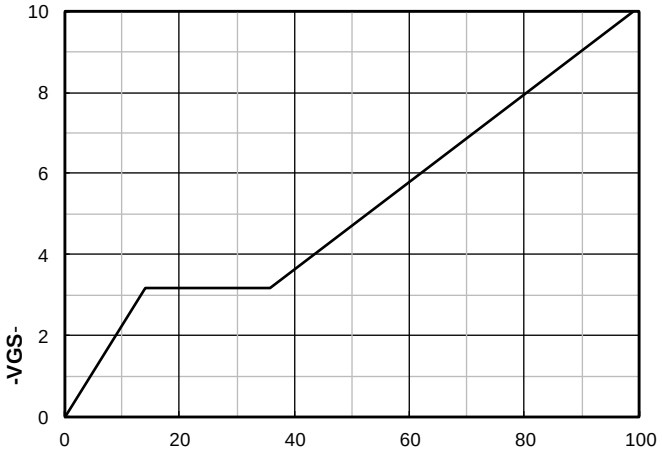


Figure 4. Gate Charge

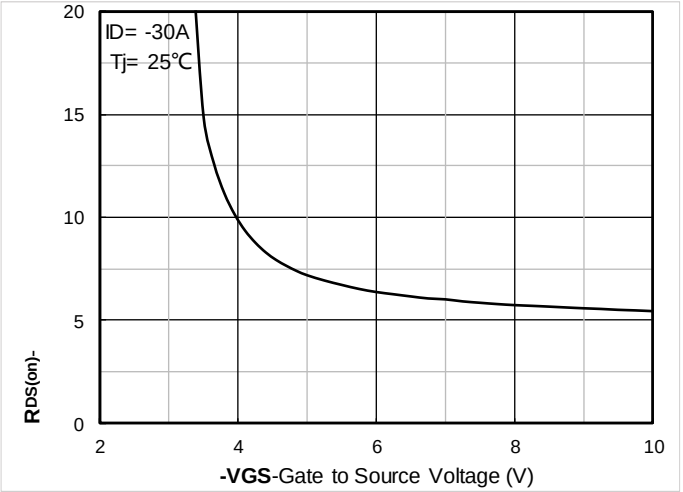


Figure 5. On-Resistance vs Gate to Source Voltage

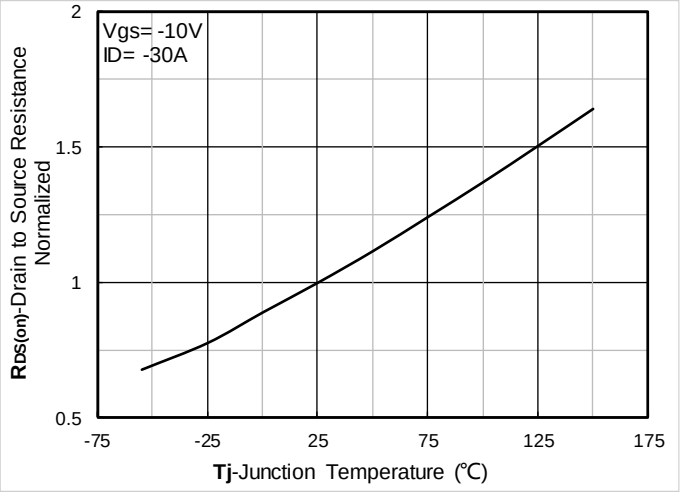
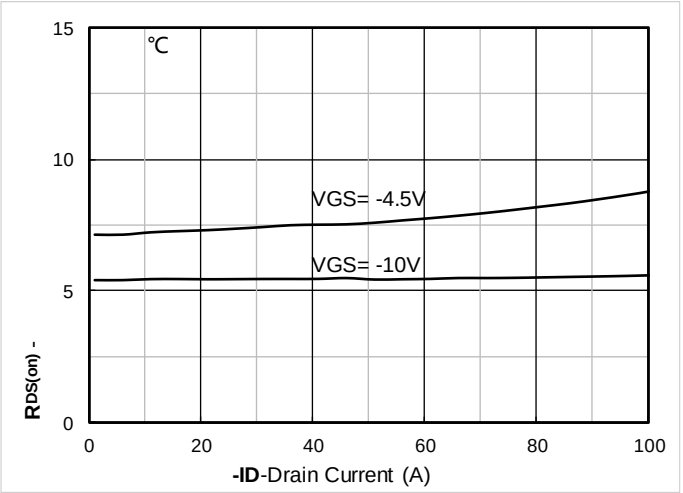


Figure 6. Normalized On-Resistance



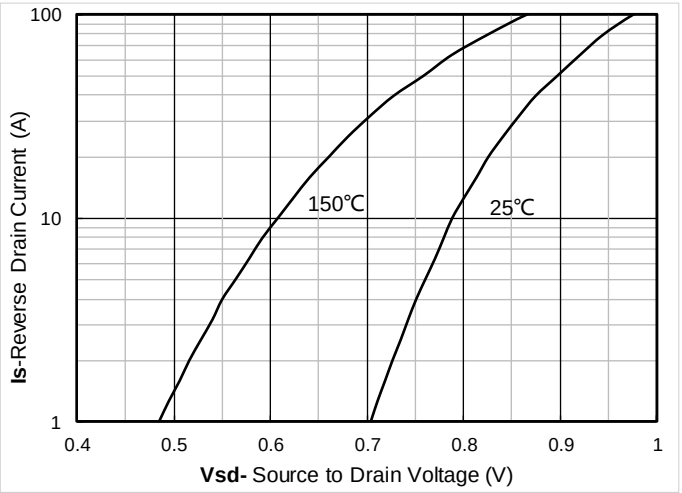


Figure 7. $R_{DS(on)}$

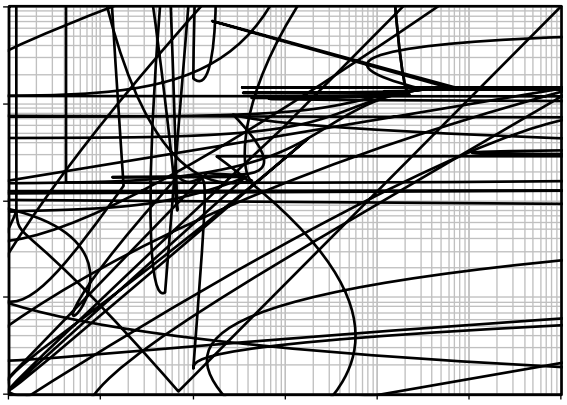


Figure 13. Maximum Transient Thermal Impedance

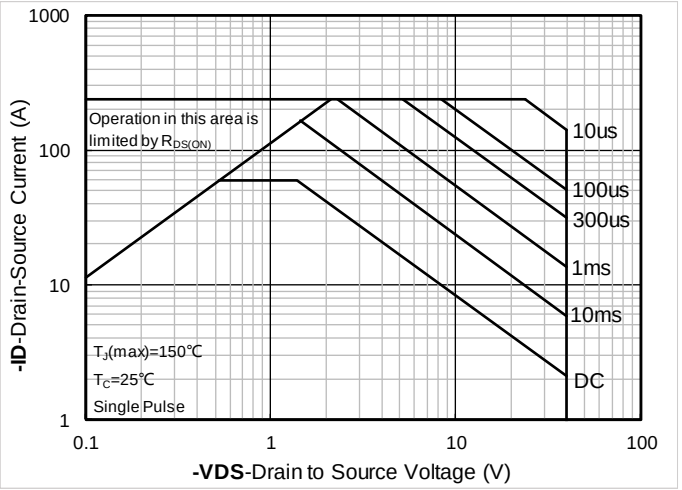
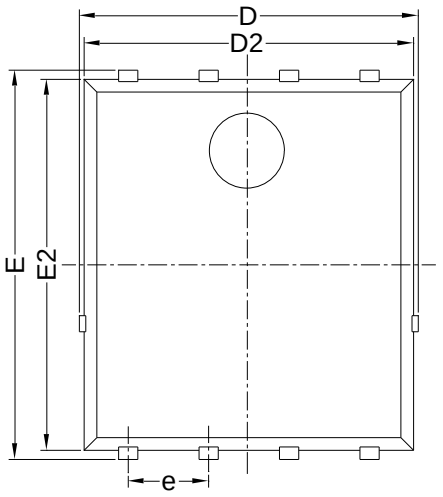
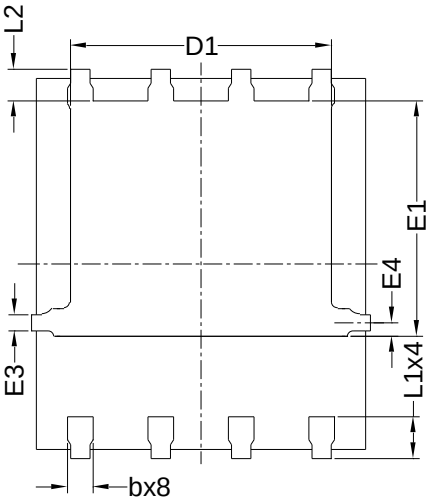


Figure 14. Safe Operation Area

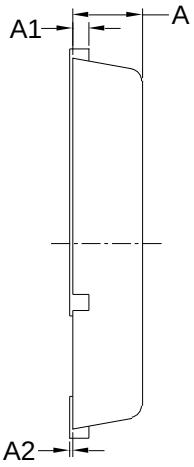
PDFN5060-8L-B-1.1MM Package information



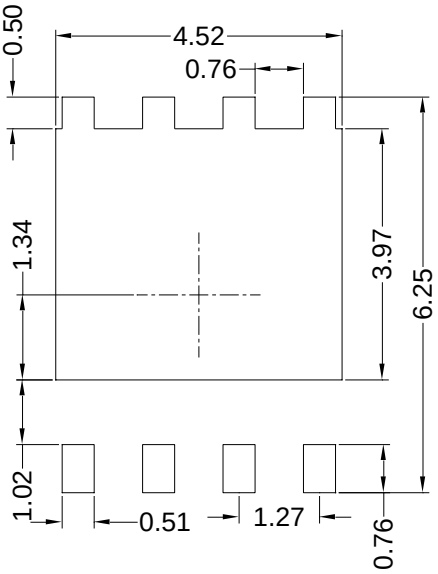
Top View



Bottom View



Side View



Suggested Solder Pad Layout
Top View

SYMBOL	MILLIMETER		
	MIN	NOM	MAX
D	5.15	5.35	5.55
E	5.95	6.15	6.35
A	1.00	1.10	1.20
A1		0.254 BSC	
A2			0.10
D1	3.92	4.12	4.32
E1	3.52	3.72	3.92
D2	5.00	5.20	5.40
E2	5.66	5.86	6.06
E3		0.254 REF	
E4		0.21 REF	
L1	0.56	0.66	0.76
L2		0.50 BSC	
b	0.31	0.41	0.51
e		1.27 BSC	

Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.10mm.
3.The pad layout is for reference purposes only.

Disclaimer

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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 improper use of sale.

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