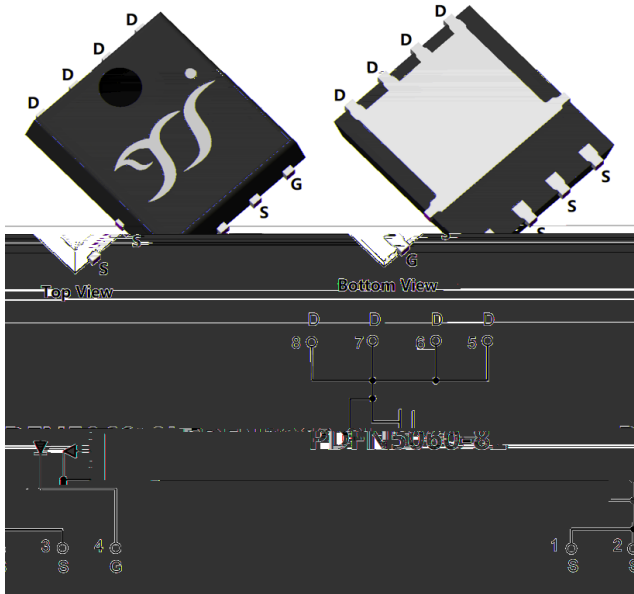




YJG60P04A

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	$T_A=25^\circ C$	I_D	-14	A
	$T_A=100^\circ C$		-9	
	$T_C=25^\circ C$		-60	
	$T_C=100^\circ C$		-38	
Pulsed Drain Current ^A		I_{DM}	-240	A
Avalanche energy ^B		EAS	400	mJ
Total Power Dissipation ^C	$T_A=25^\circ C$	P_D	2.5	W
	$T_A=100^\circ C$		1	
	$T_C=25^\circ C$		83	
	$T_C=100^\circ C$		33	
Junction and Storage Temperature Range		T_J, T_{STG}	-55 +150	$^\circ C$

Thermal resistance

Parameter		Symbol	Typ	Max	Units
Thermal Resistance Junction-to-Ambient ^D	Steady-State	R	40	50	$^\circ C/W$
Thermal Resistance Junction-to-Case	Steady-State	R	1.2	1.5	

Ordering Information (Example)

PREFERRED 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



YJG60P04A

Typical Electrical and Thermal Characteristics Diagrams

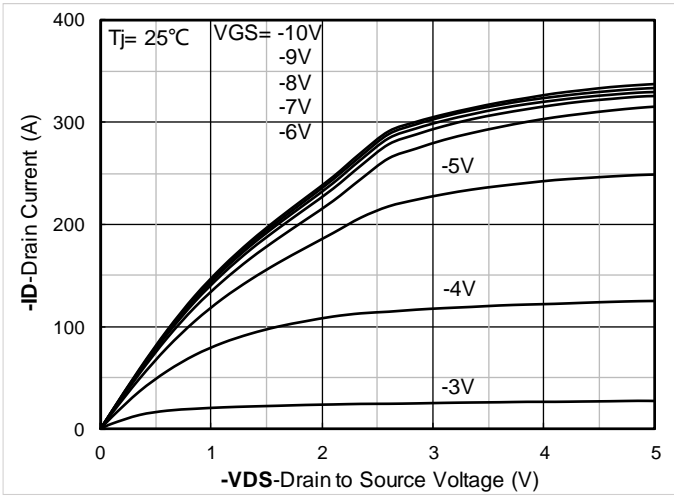


Figure 1. Output Characteristics

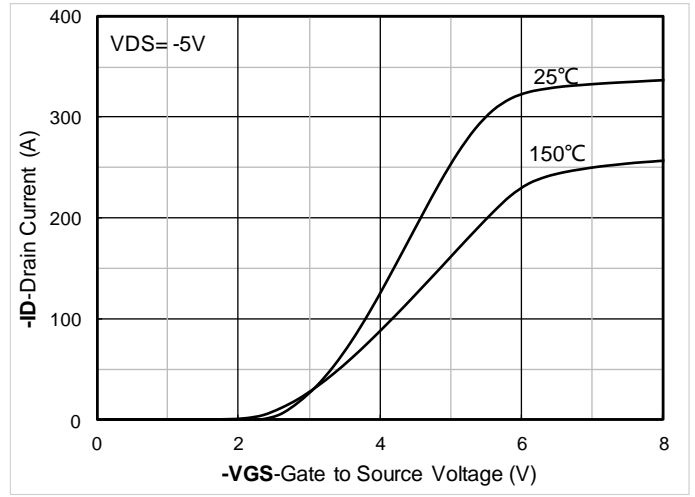


Figure 2. Transfer Characteristics

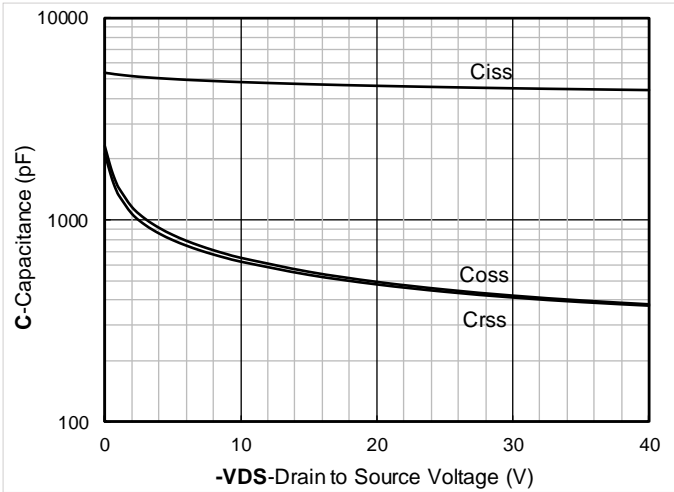


Figure 3. Capacitance Characteristics

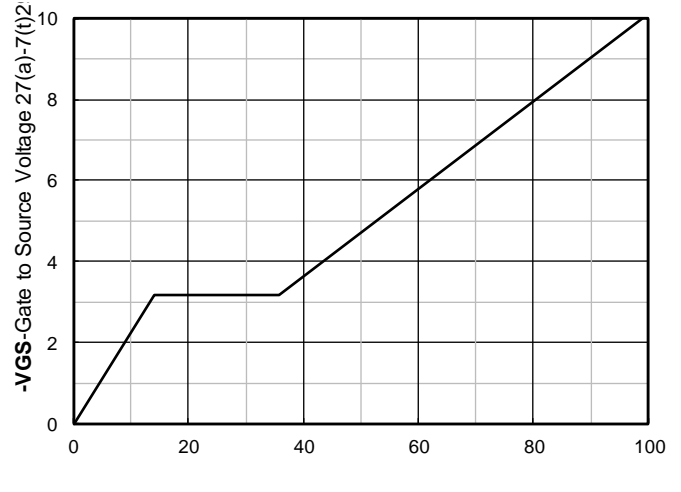


Figure 4. Gate Charge

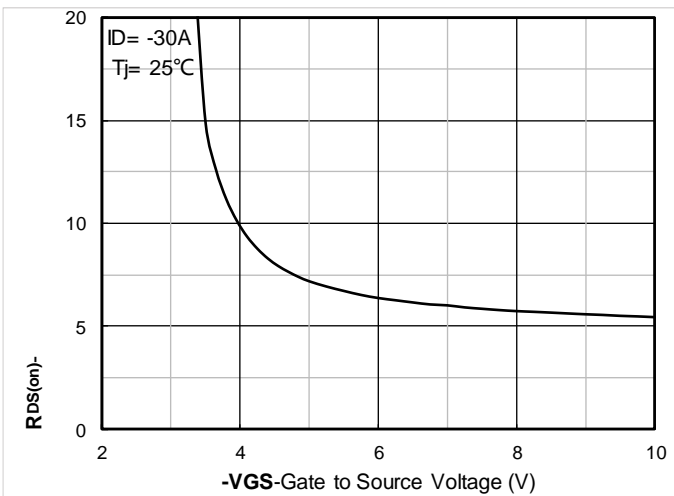


Figure 5. On-Resistance vs Gate to Source Voltage

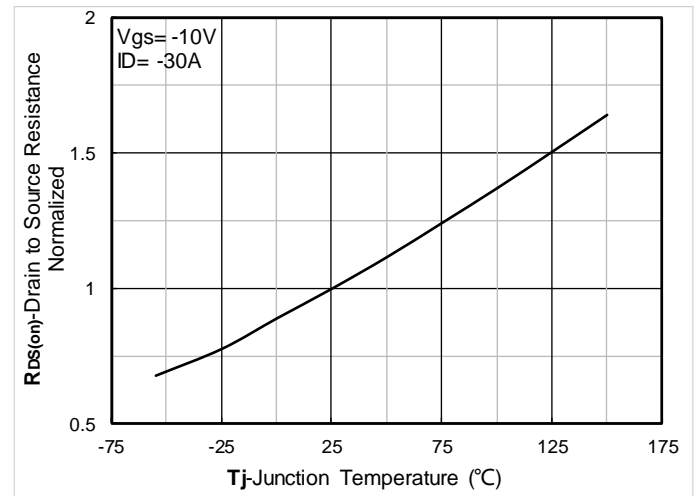


Figure 6. Normalized On-Resistance



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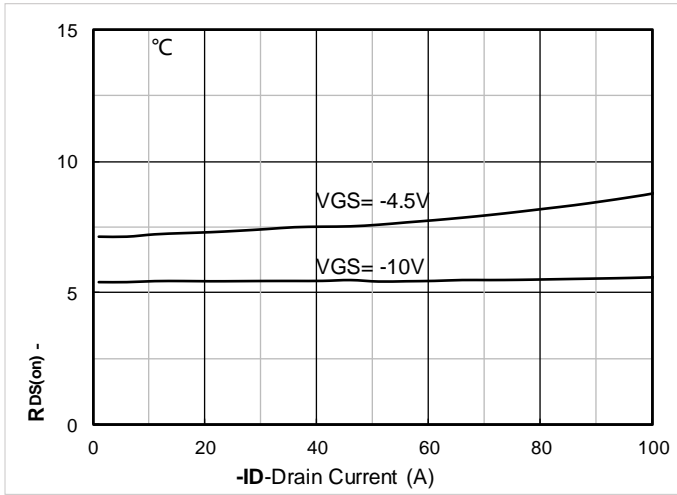
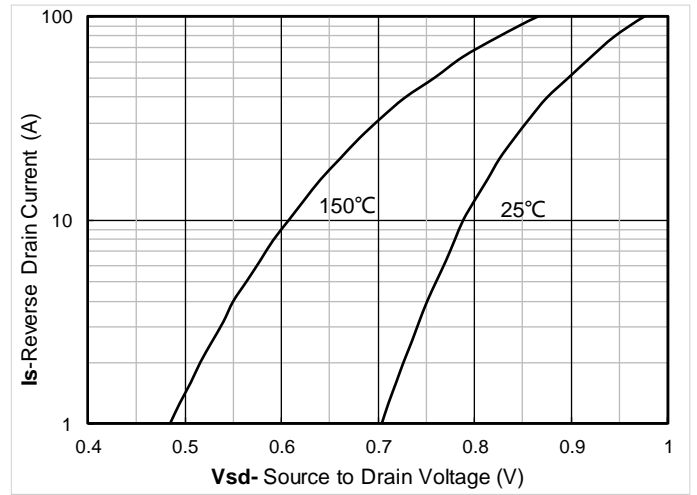


Figure 7. $R_{DS(on)}$





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Figure 13. Maximum Transient Thermal Impedance

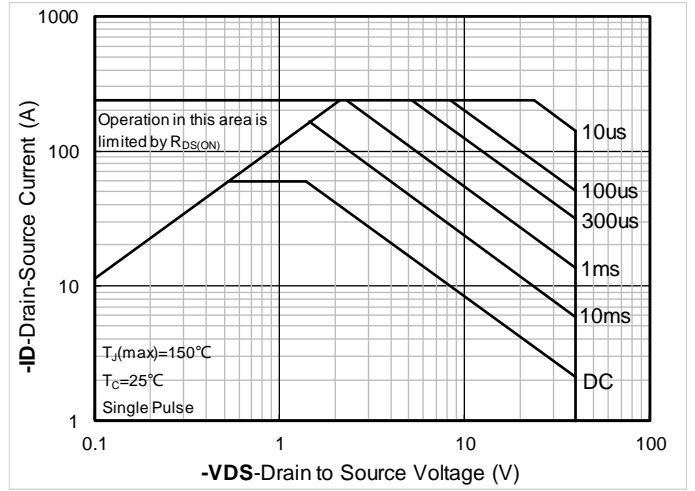
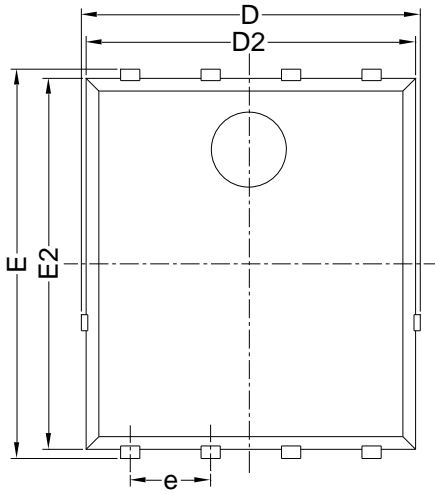


Figure 14. Safe Operation Area

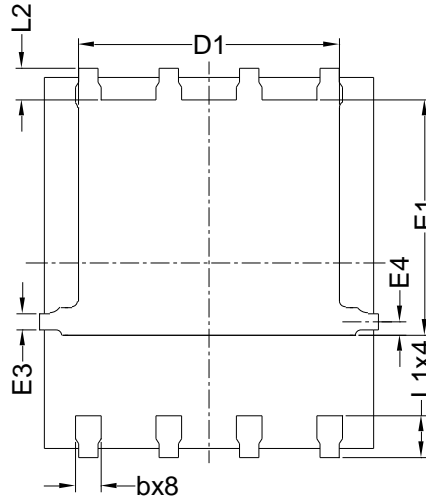


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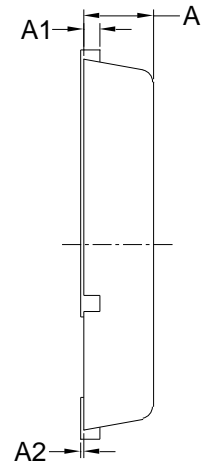
PDFN5060-8L-B-1.1MM Package information



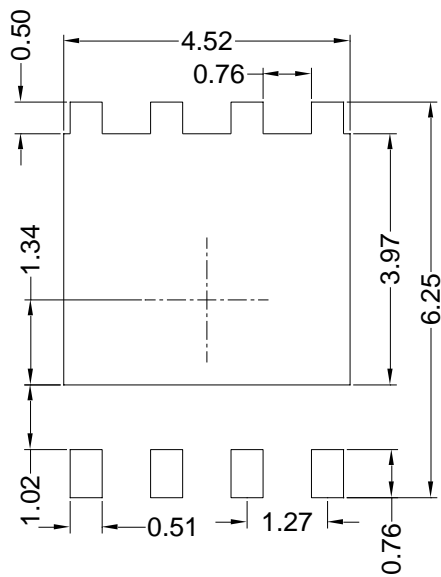
Top View



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: ± 0.10 mm.
3. The pad layout is for reference purposes only.



YJG60P04A

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