



# YJG150N03A

## N-Channel Enhancement Mode Field Effect Transistor

### Product Summary

$V_{DS}$	30 V
$I_D$	150 A
$R_{DS(ON)}$ ( at $V_{GS}=10V$ )	2.0 mohm
$R_{DS(ON)}$ ( at $V_{GS}=4.5V$ )	3.3 mohm
100% EAS Tested	
100% $V_{DS}$ Tested	

### General Description

Trench Power MV MOSFET technology  
Excellent package for heat dissipation  
High density cell design for low  $R_{DS(ON)}$   
Moisture Sensitivity Level 1  
Epoxy Meets UL 94 V-0 Flammability Rating  
Halogen Free

### Applications

DC-DC Converters  
Power management functions  
Backlighting

### Absolute Maximum Ratings ( $T_A=25$ unless otherwise noted)

Parameter	Symbol	Limit	Unit
Drain-source Voltage	$V_{DS}$	30	V

**YJG150N0**



## Typical Performance Characteristics

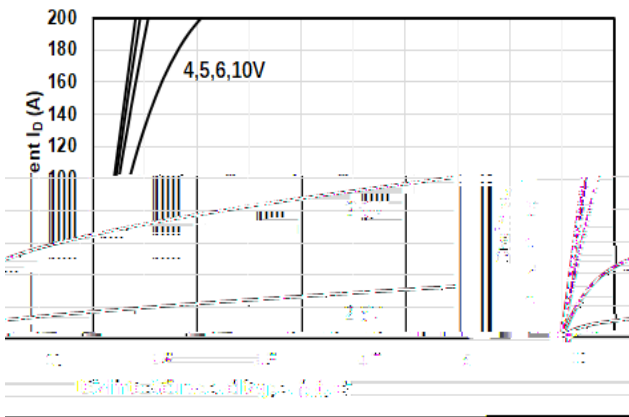


Figure1. Output Characteristics

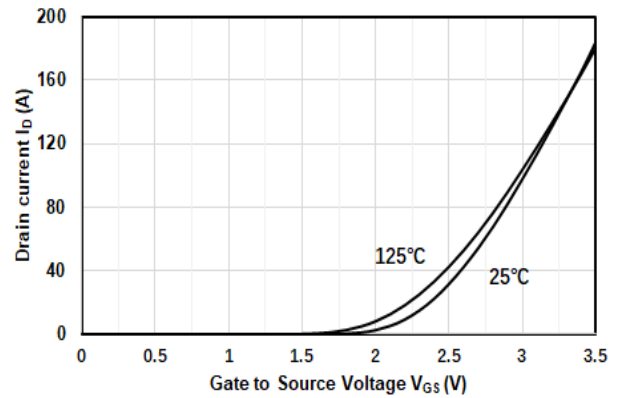


Figure2. Transfer Characteristics

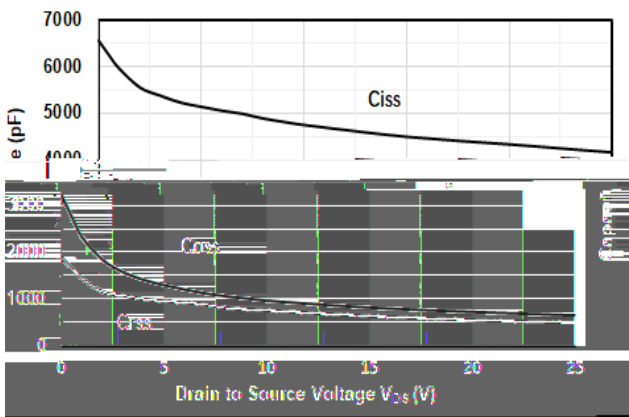


Figure3. Capacitance Characteristics

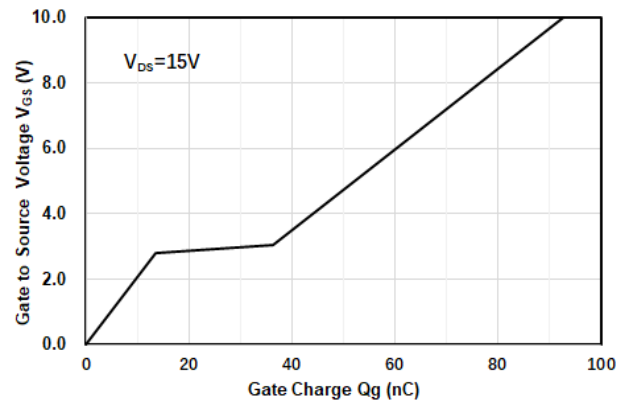


Figure4. Gate Charge

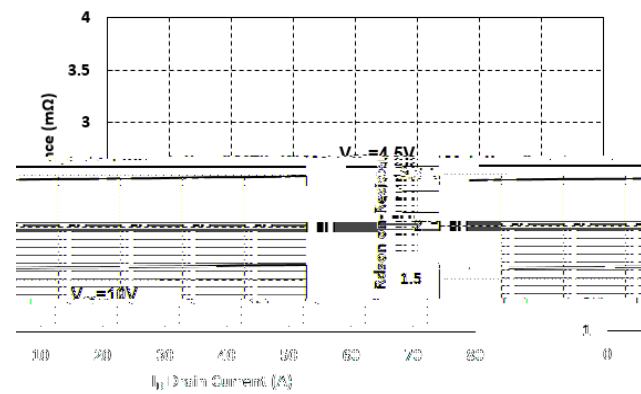


Figure5. Drain-Source on Resistance

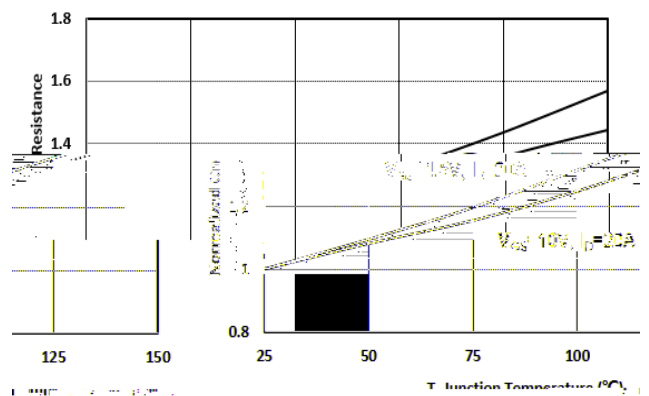


Figure6. Drain-Source on Resistance



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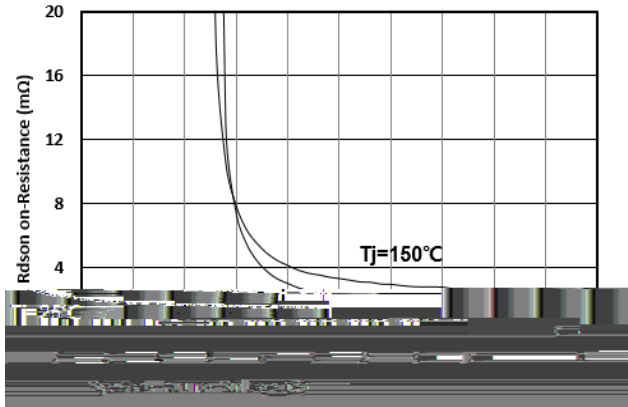


Figure7. On-Resistance vs V<sub>GS</sub>

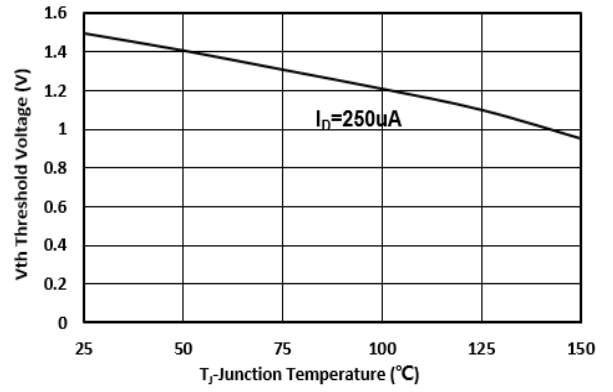


Figure8. V<sub>th</sub> vs Temperature

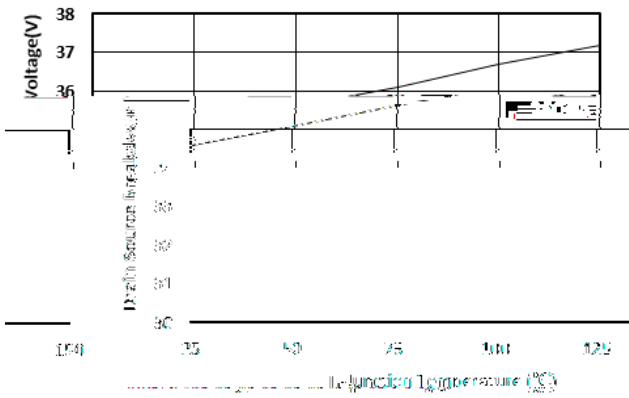


Figure9. Breakdown Voltage vs Temperature

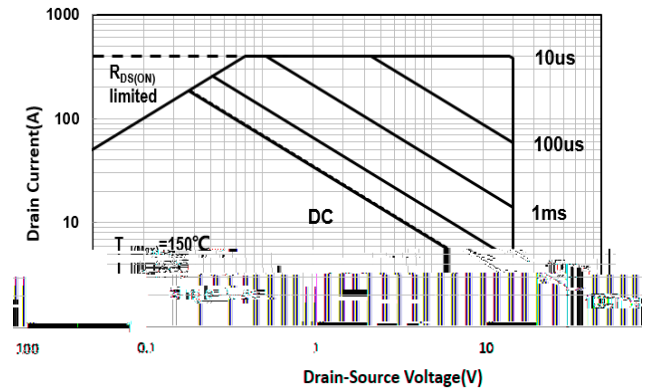


Figure10. Safe Operation Area

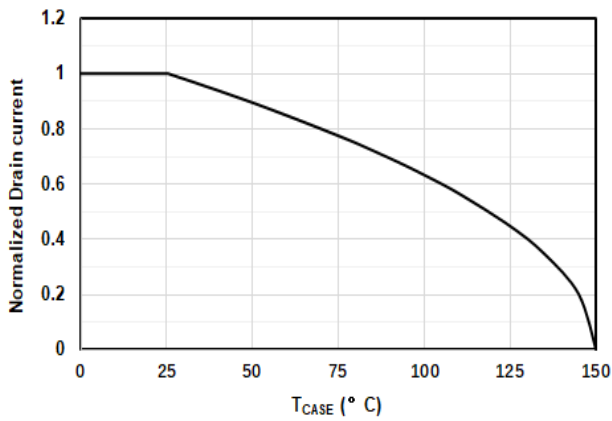


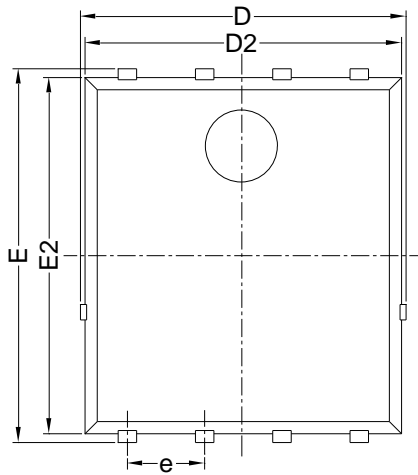
Figure11. Drain current vs. Case Temperature

**YJG150**

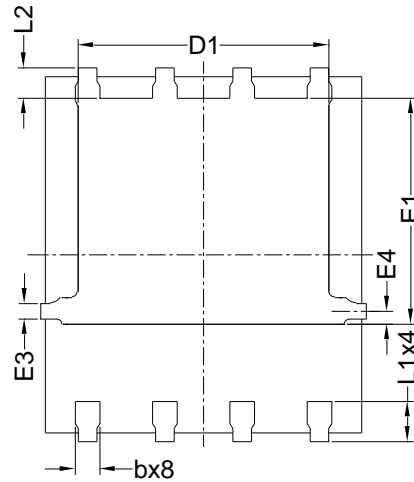


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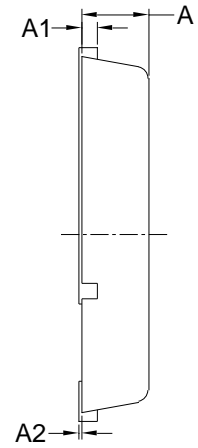
## PDFN5060-8L-B-1.1MM Package Information



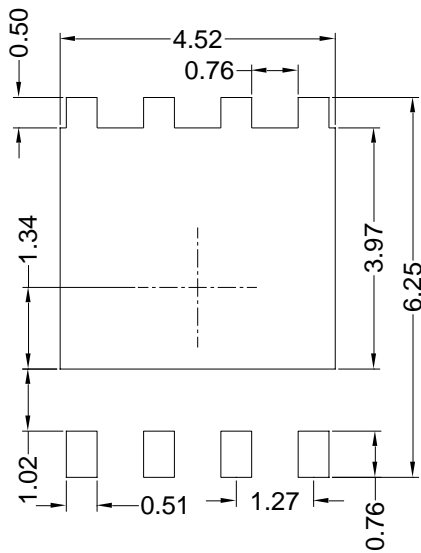
Top View



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:  $\pm 0.10$ mm.
3. The pad layout is for reference purposes only.



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