



## N-Channel Enhancement Mode Field Effect Transistor

### Product Summary

$V_{DS}$	40V
$I_D$	340A
$R_{DS(ON)}$ ( at $V_{GS}=10V$ )	1.3m
100% EAS Tested	
100% $V_{DS}$ Tested	

### General Description

Excellent package for heat dissipation  
High density cell design for low  $R_{DS(ON)}$   
Moisture Sensitivity Level 1



## YJT1D3G04HQ

### Electrical Characteristics ( $T_J=25$ unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
<b>Static Parameter</b>						
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS}=0V, I_D$	40	-	-	V
		$V_{GS}=0V, I_D=1mA$	40	-	-	



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## Typical Electrical and Thermal Characteristics Diagrams

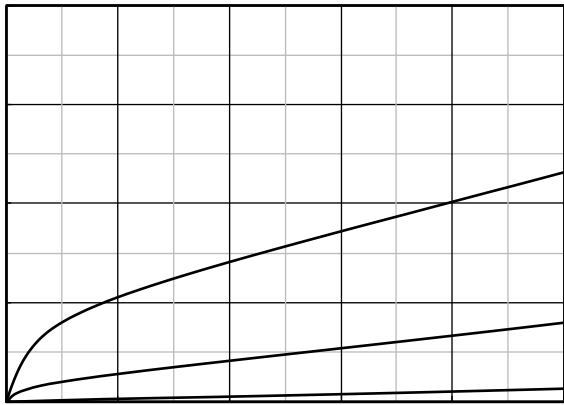


Figure 1. Output Characteristics

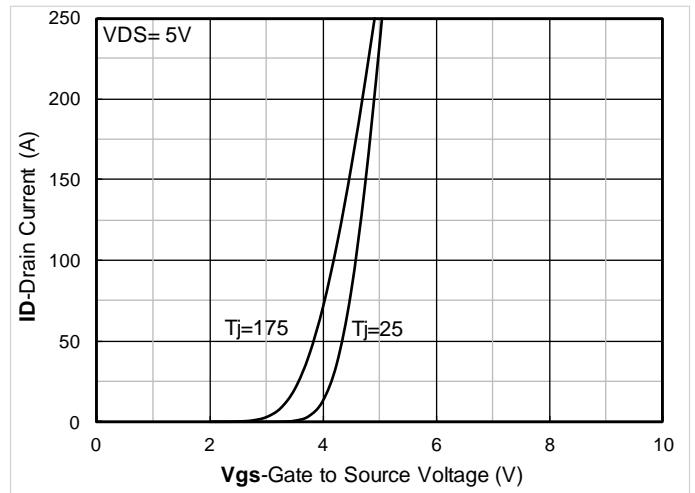


Figure 2. Transfer Characteristics

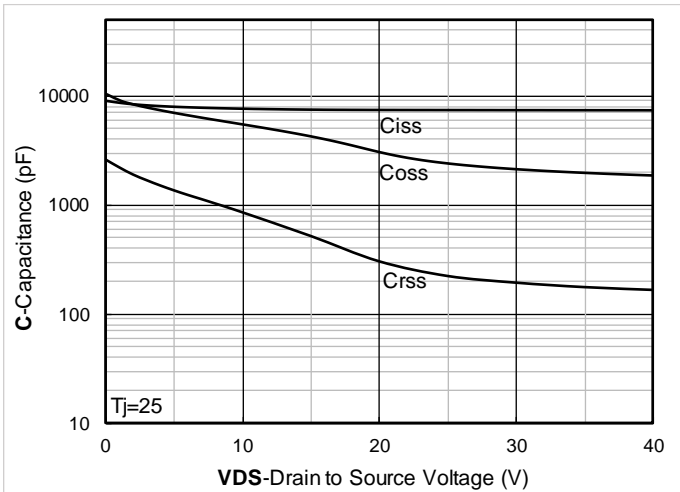


Figure 3. Capacitance Characteristics

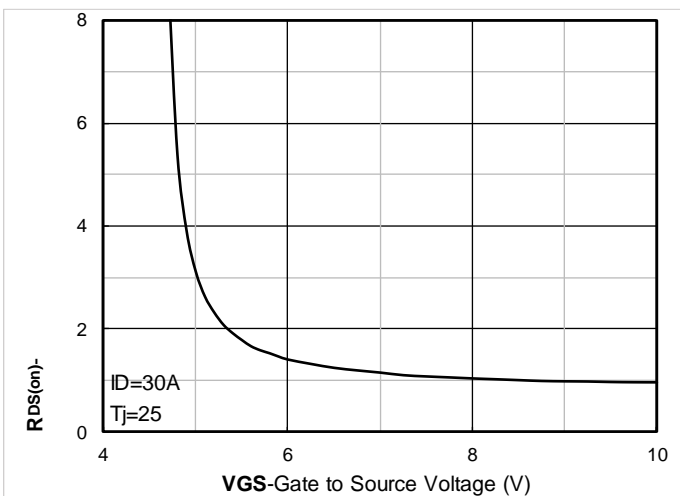


Figure 5. On-Resistance vs Gate to Source Voltage

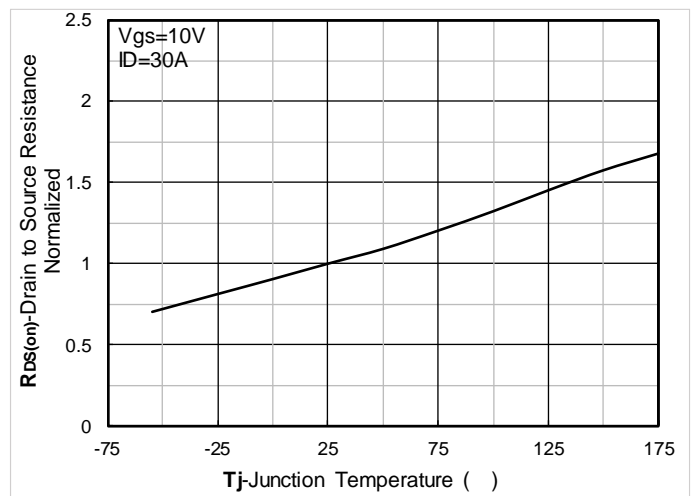


Figure 6. Normalized On-Resistance

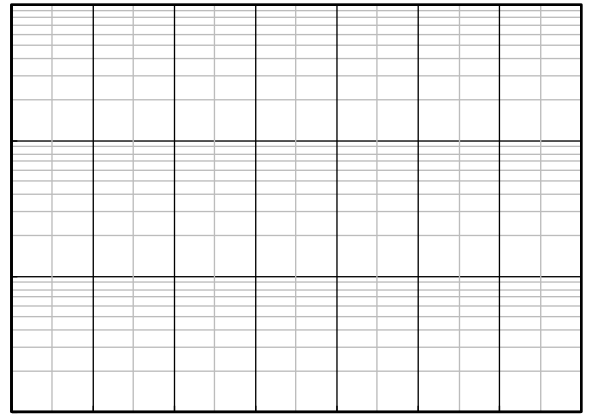
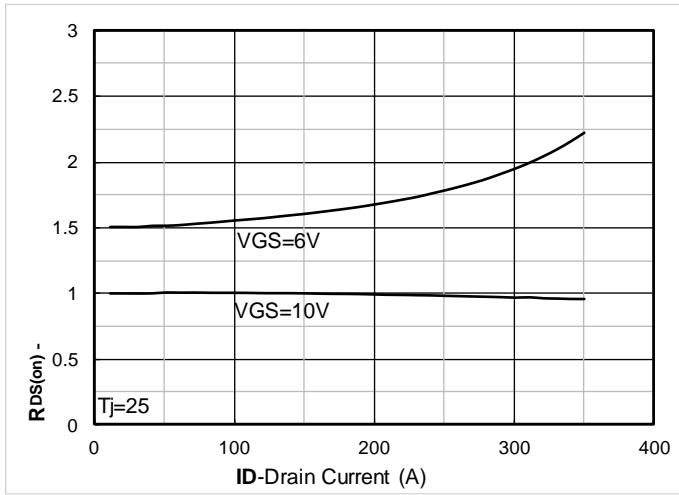


Figure 7. RDS(on)

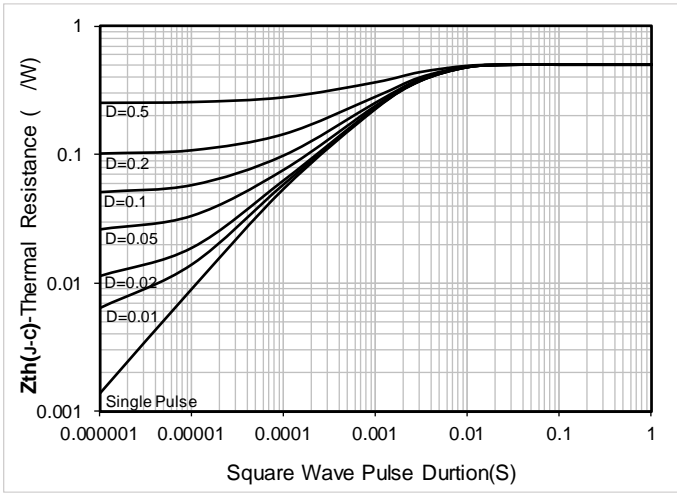


Figure 13. Maximum Transient Thermal Impedance

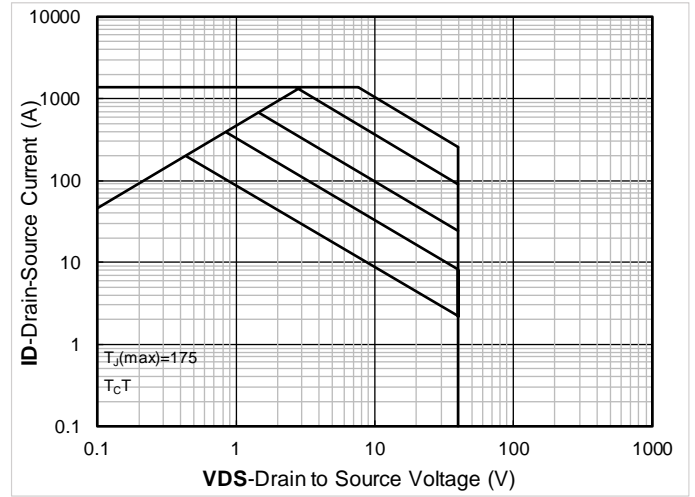


Figure 14. Safe Operation Area

### Test Circuits & Waveforms

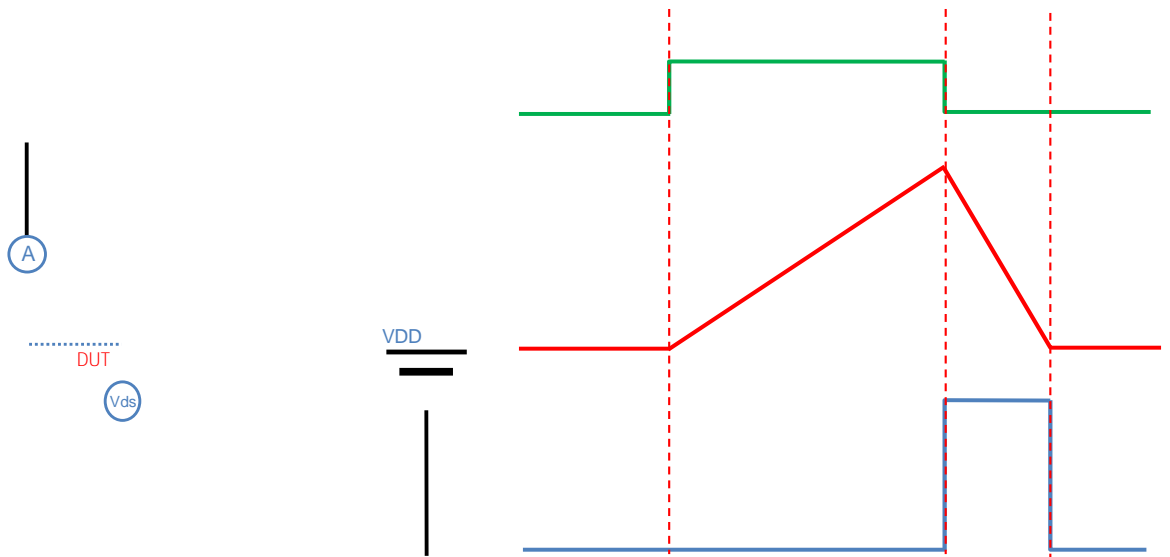


Figure A. Unclamped Inductive Switching (UIS) Test Circuit & Waveform



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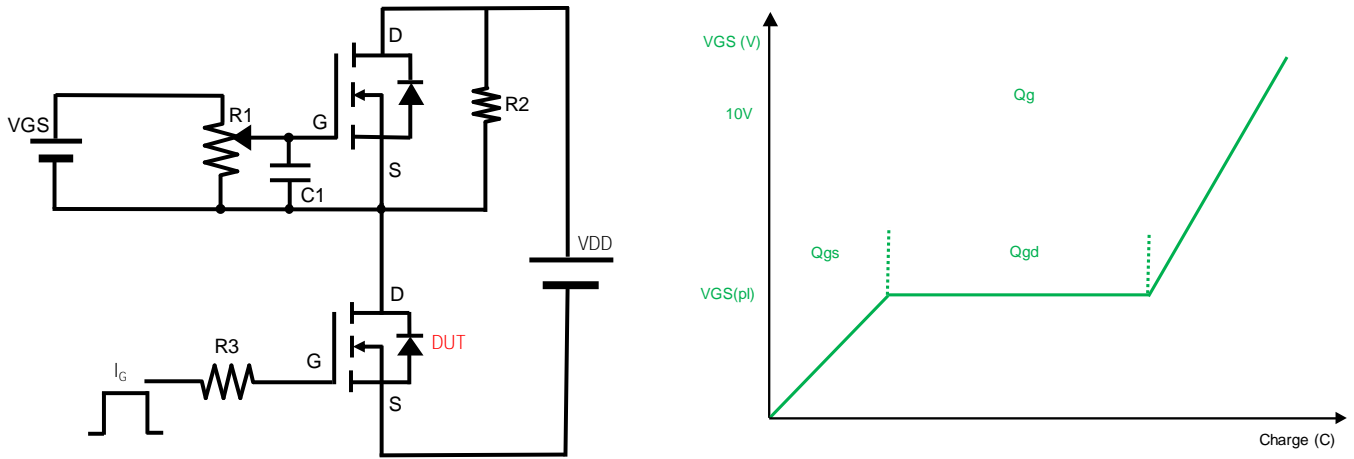


Figure B. Gate Charge Test Circuit & Waveform



## TOLL Package information

SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	2.2	2.3	2.4
A1	1.7	1.8	1.9
b	0.7	0.8	0.9
b1	9.7	9.8	9.9
b2	1.1	1.2	1.3
c	0.4		

Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.03\text{mm}$ .
3. The pad layout is for reference purposes only.

SUGGESTED SOLDER PAD LAYOUT  
TOP VIEW



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### Disclaimer

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 automotive electronics, are not designed for use in medical, life-saving, lifesustaining, or