



# YJT300G10A

---

## N-Channel Enhancement Mode Field Effect Transistor

### Product Summary

$V_{DS}$	100V
$I_D$	300A
$R_{DS(ON)}$ ( at $V_{GS}=10V$ )	1.55m
$R_{DS(ON)}$ ( at $V_{GS}=6V$ )	2.4m
100% EAS Tested	
100% $V_{DS}$ Tested	

### General Description

Excellent package for heat dissipation  
High density cell design for low  $R_{DS(ON)}$   
Epoxy Meets UL 94 V-0 Flammability Rating



# YJT300G10A

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

Parameter	Symbol	Conditions	Min	Typ	Max
-----------	--------	------------	-----	-----	-----



## Typical Electrical and Thermal Characteristics Diagrams

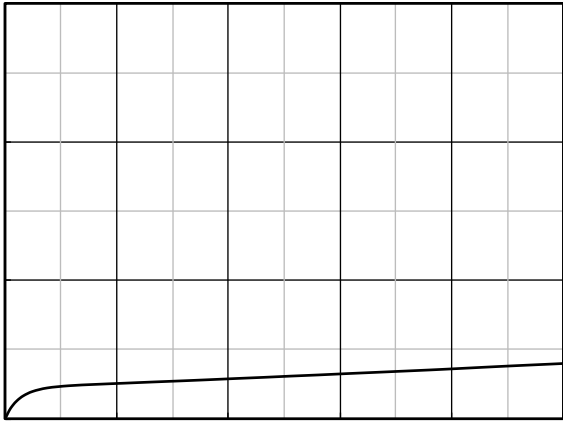


Figure 1. Output Characteristics

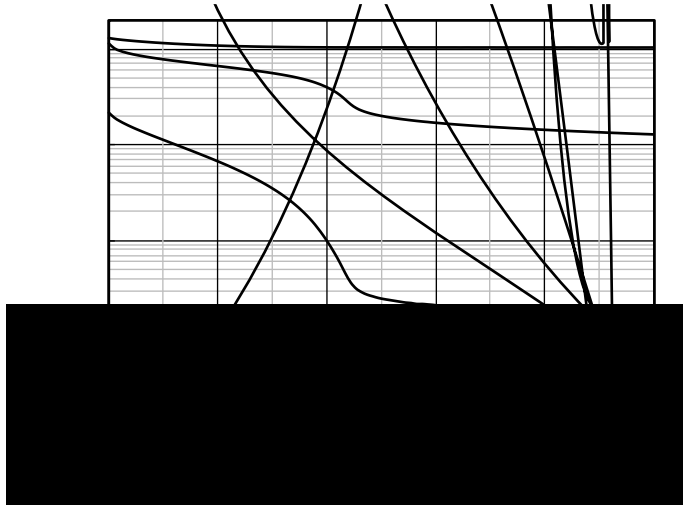


Figure 3. Capacitance Characteristics

Figure 2. Transfer Characteristics

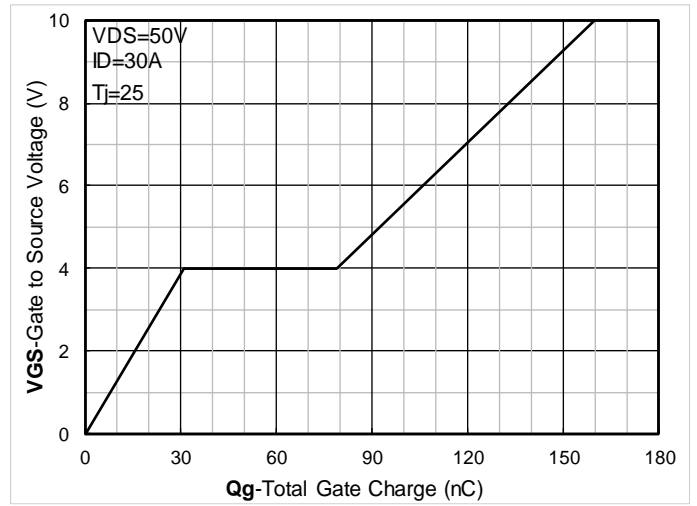


Figure 4. Gate Charge

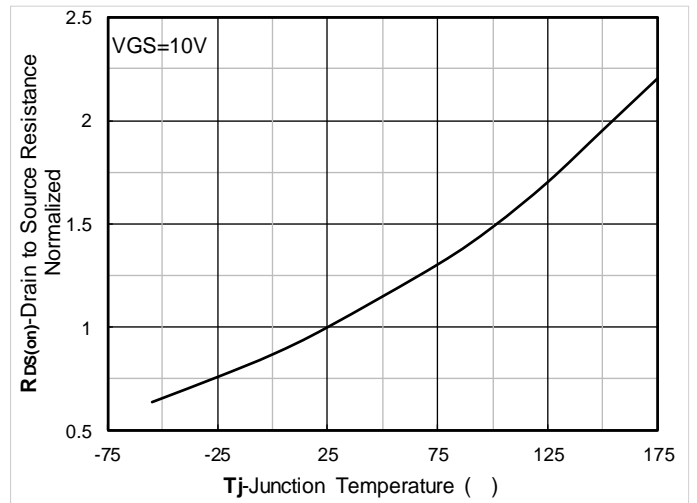


Figure 6. Normalized On-Resistance

Figure 5. On-Resistance vs Gate to Source V 0 596.02tag



# YJT300G10A

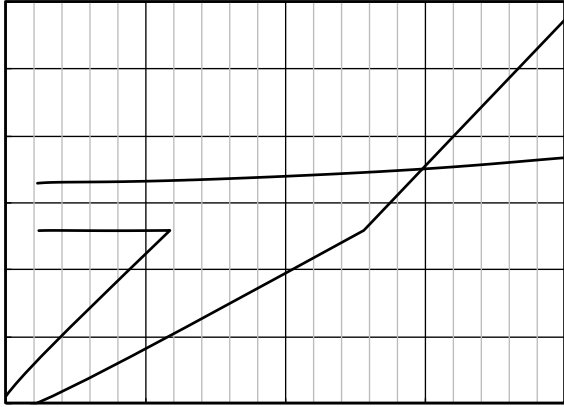


Figure 7.  $R_{DS(on)}$  VS Drain Current

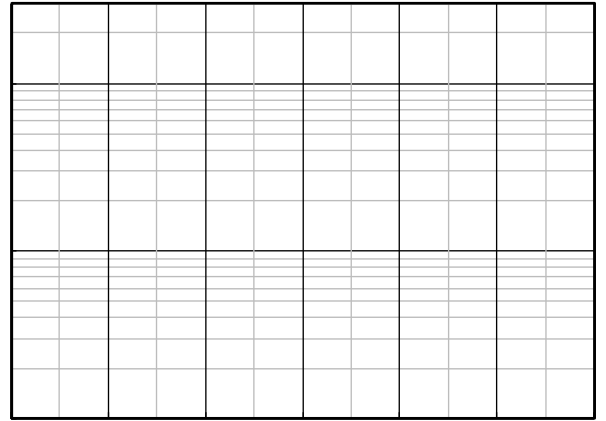


Figure 8. Forward characteristics of reverse diode

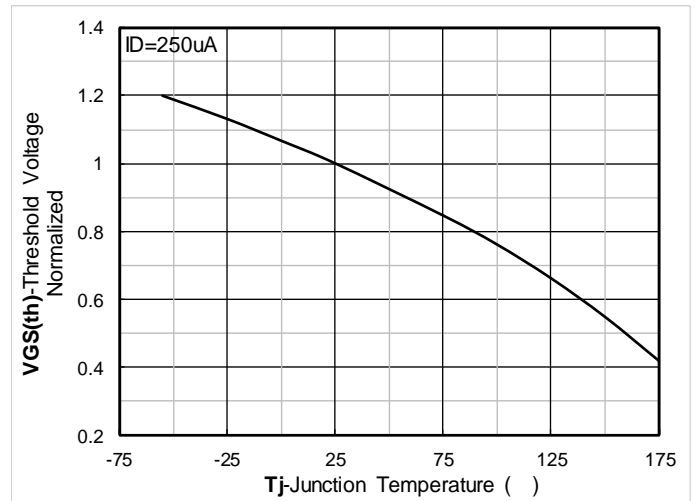


Figure 9. Normalized breakdown voltage

Figure 10. Normalized Threshold voltage

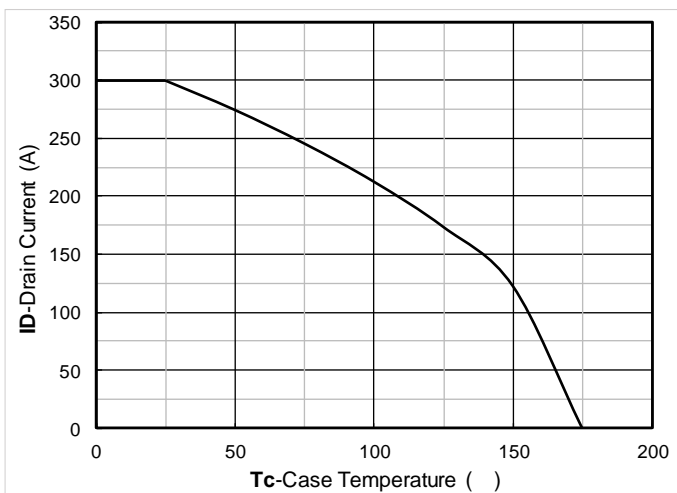


Figure 11. Current dissipation

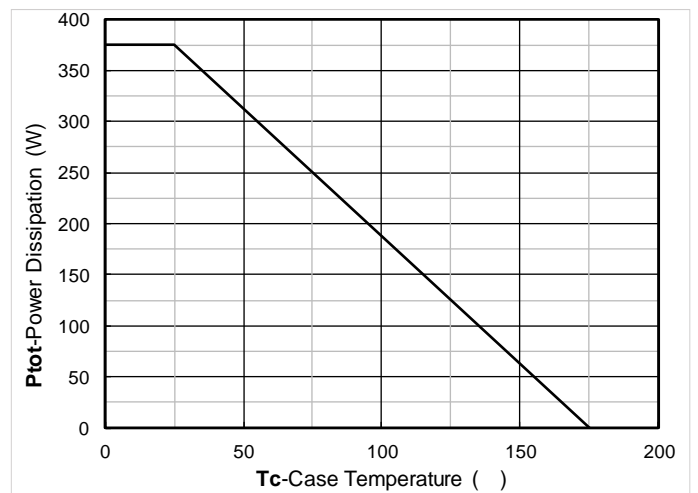


Figure 12. Power dissipation

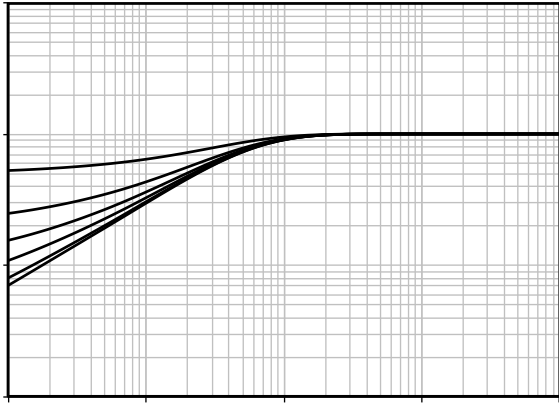


Figure 13. Maximum Transient Thermal Impedance

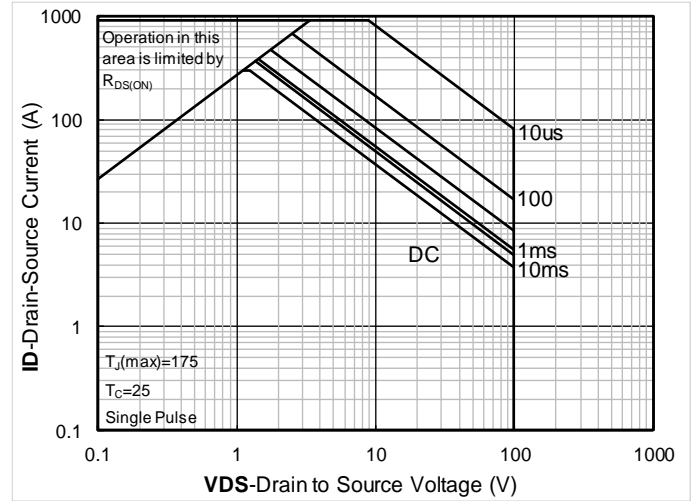


Figure 14. Safe Operation Area

## Test Circuits & Waveforms

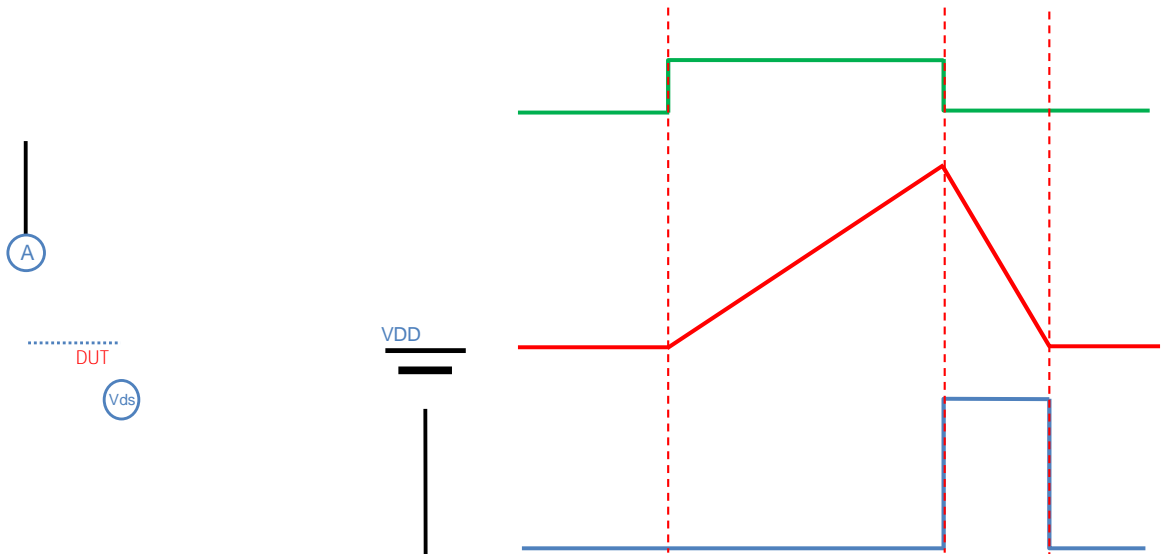


Figure A. Unclamped Inductive Switching (UIS) Test Circuit & Waveform



# YJT300G10A



Figure B. Gate Charge Test Circuit & Waveform



Figure C. Resistive Switching Test Circuit & Waveform

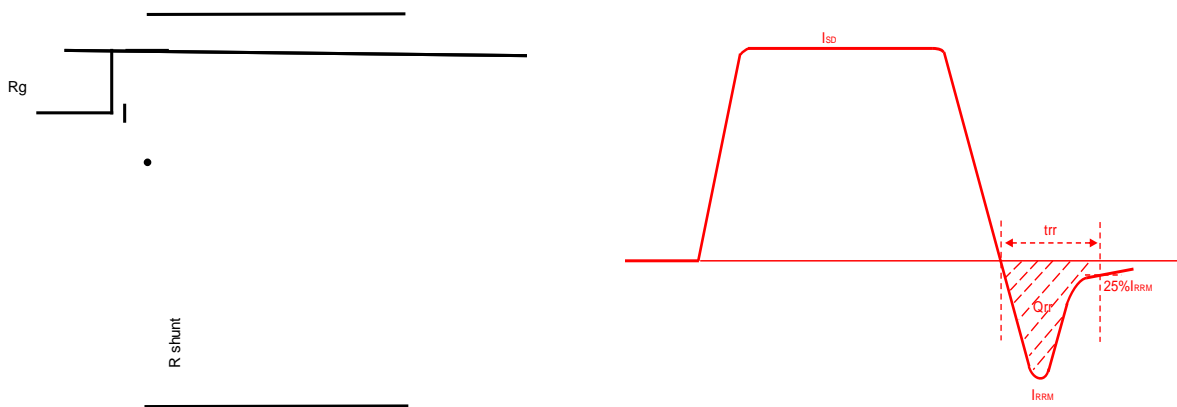


Figure D. Diode Recovery Test Circuit & Waveform



**TOLL Package information**



## Disclaimer

The information prese