



YJF70G10A

N-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}	100V
I_D	70A
$R_{DS(ON)}$ (at $V_{GS}=10V$)	5.5m
$R_{DS(ON)}$ (at $V_{GS}=4.5V$)	6.5m
100% EAS Tested	
100% V_{DS} Tested	

General Description

Split gate trench MOSFET technology
 Low $R_{DS(on)}$ & FOM
 Excellent stability and uniformity
 Epoxy Meets UL 94 V-0 Flammability Rating
 Halogen Free

Applications

Power management
 Portable equipment

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

Parameter	Symbol	Limit	Units
Drain-source Voltage	V_{DS}	100	V
Drain Current	I_D	$T_A=25$	15
		$T_A=100$	9.5
		$T_C=25$	70
		$T_C=100$	44
Pulsed Drain Current ^A	I_{DM}	300	A
Avalanche energy ^B	EAS	306	mJ
Total Power Dissipation ^C	P_D	$T_A=25$	2.5
		$T_A=100$	1
		$T_C=25$	62
		$T_C=100$	25
Junction and Storage Temperature Range	T_J, T_{STG}	-55 +150	

Thermal resistance

Parameter	Symbol	Typ	Max	Units
Thermal Resistance Junction-to-Ambient ^D	R_{JA}	40	50	/W
Thermal Resistance Junction-to-Case	R_{JC}	1.6	2	

Ordering Information (Example)

OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
5000	

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Typical Electrical and Thermal Characteristics Diagrams

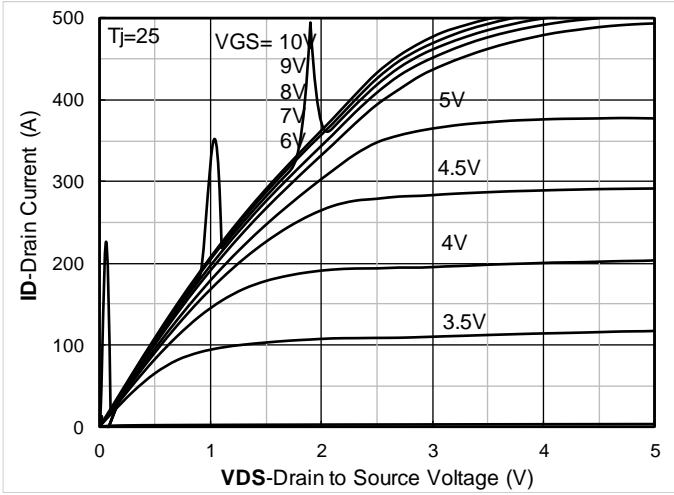


Figure 1. Output Characteristics



Figure 2. Transfer Characteristics

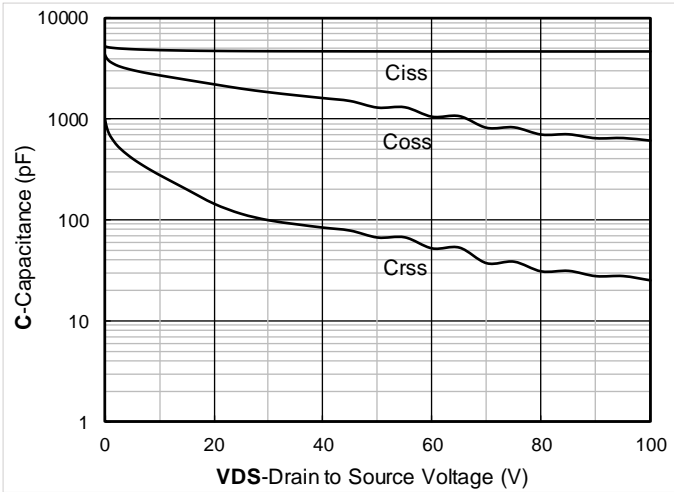


Figure 3. Capacitance Characteristics

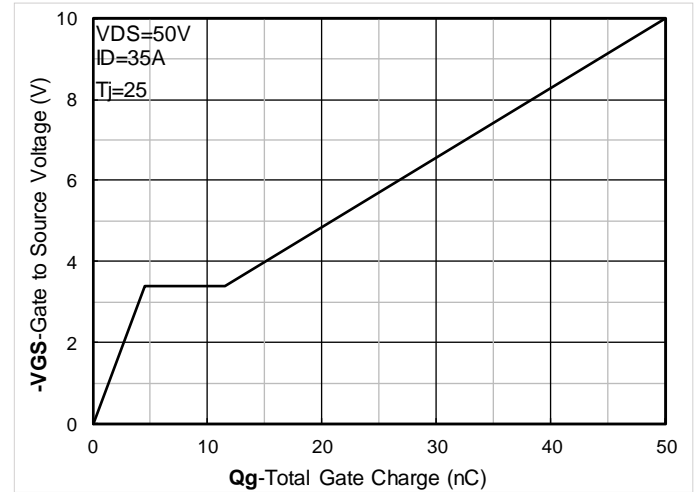


Figure 4. Gate Charge

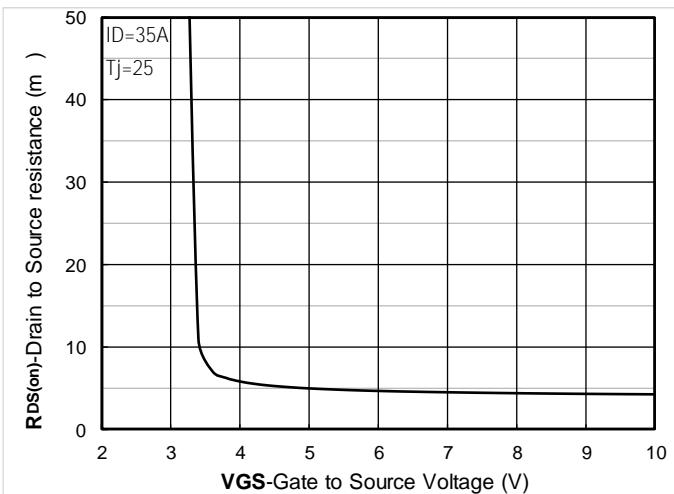


Figure 5. On-Resistance vs Gate to Source Voltage

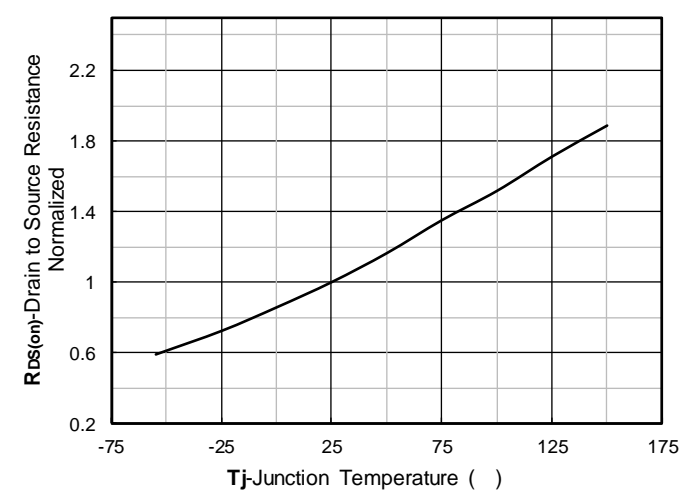


Figure 6. Normalized On-Resistance



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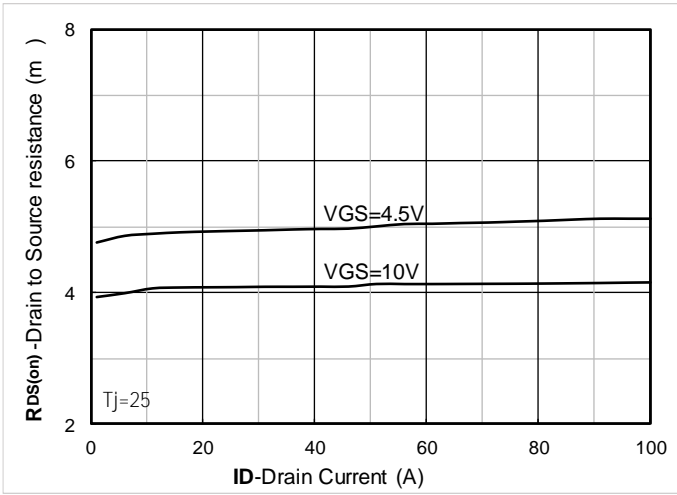


Figure 7. RDS(on) VS Drain Current

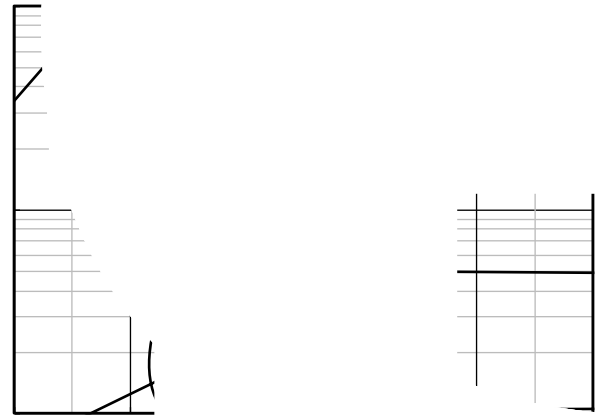


Figure 8. Forward characteristics of reverse diode

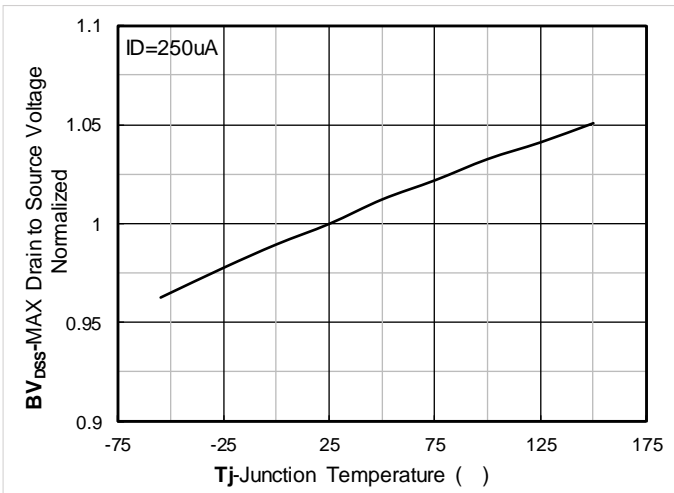


Figure 9. Normalized breakdown voltage

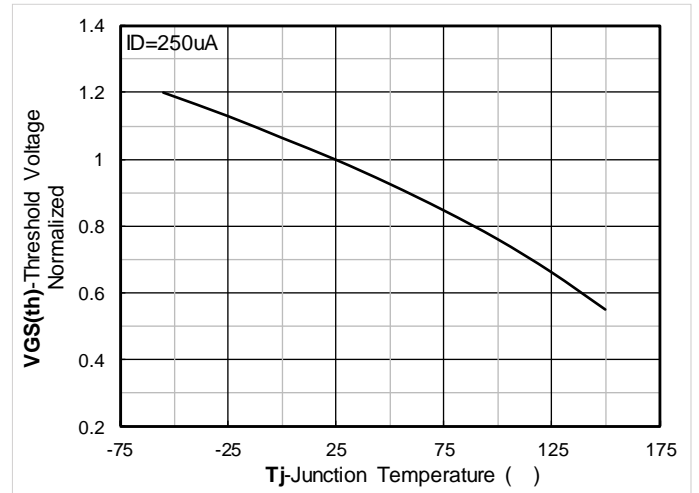


Figure 10. Normalized Threshold voltage

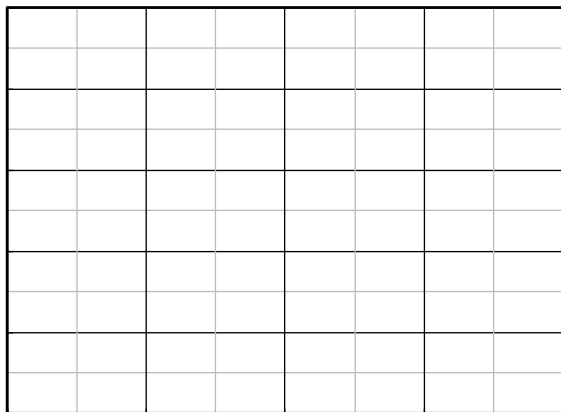


Figure 11. Current dissipation

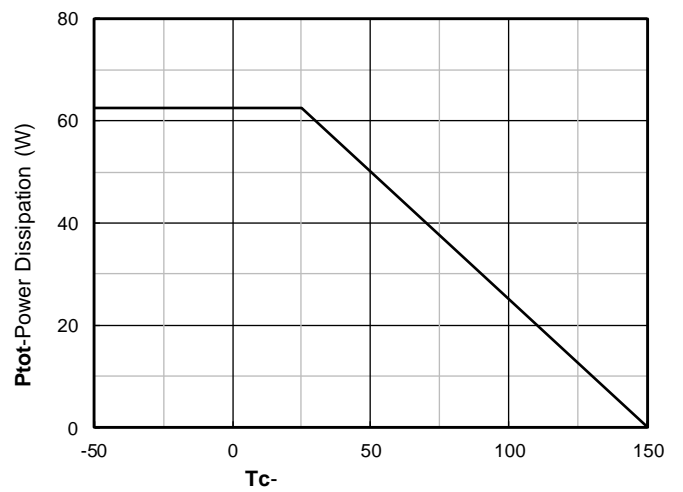


Figure 12. Power dissipation



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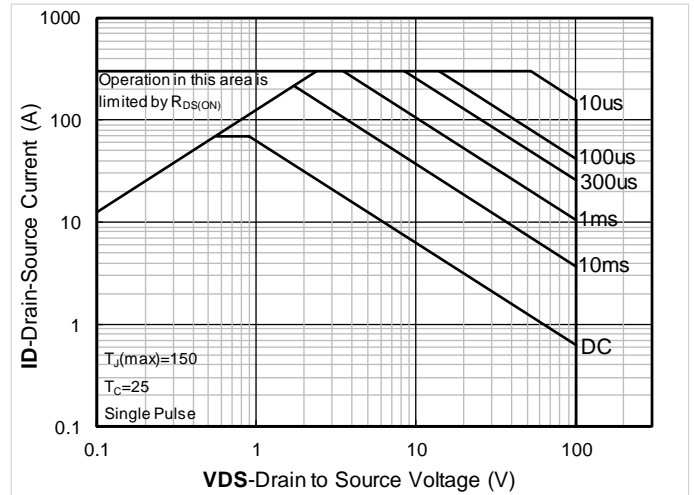


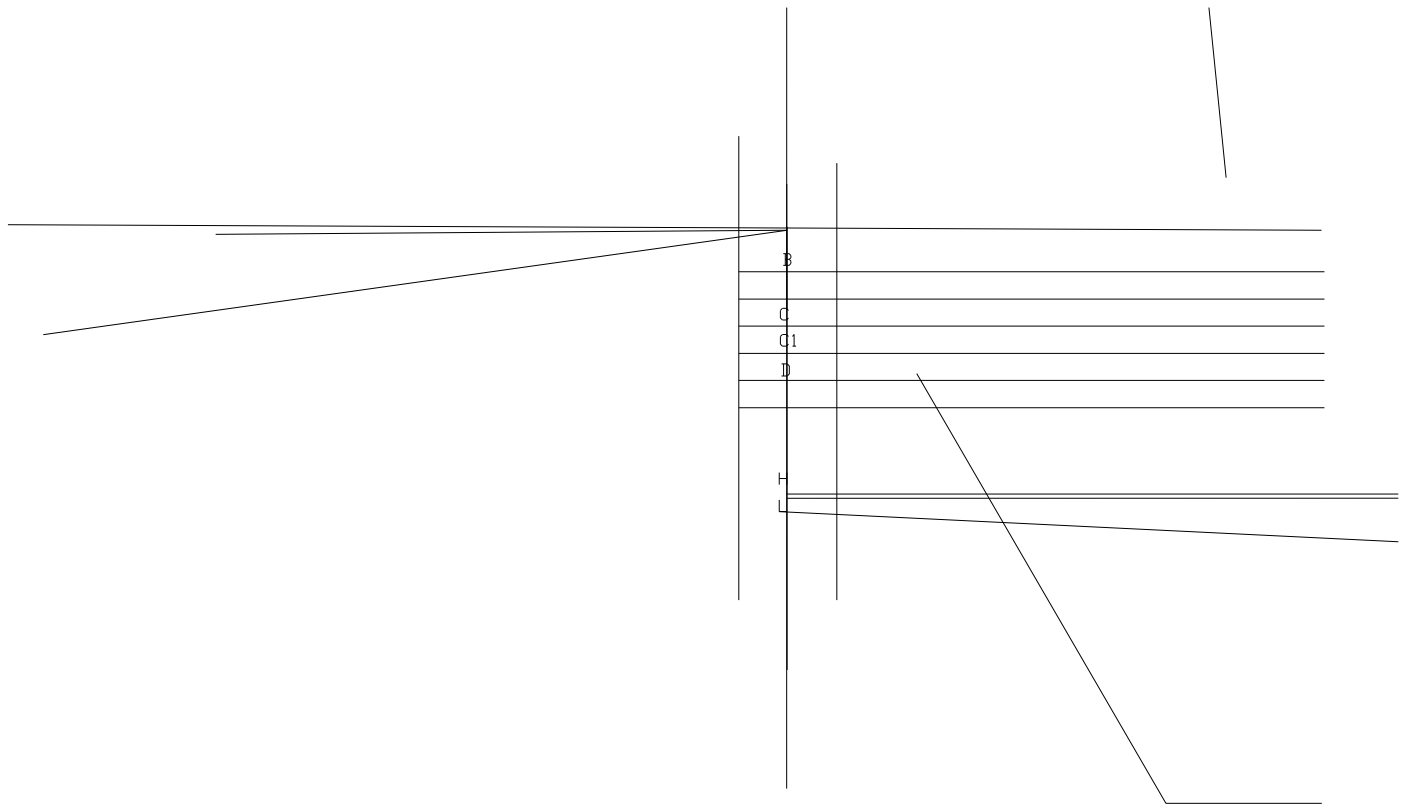
Figure 13. Maximum Transient Thermal Impedance

Figure 14. Safe Operation Area



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ITO-220AB-B Package information





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 which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-