



P-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}	-30 V
I_D	-10 A
$R_{DS(ON)}$ (at $V_{GS}=-10V$)	40 m
$R_{DS(ON)}$ (at $V_{GS}=-4.5$	



YJQ3407B

Electrical Characteristics (T_J=25 unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameter						
Drain-Source Breakdown Voltage	BV _{DSS}	V _{GS} = 0V, I _D =-	-30	-	-	V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =-30V, V _{GS} =0V	-	-	-1	
		V _{DS} =-30V, V _{GS} =0V, T _J =150	-	-	-100	
Gate-Body Leakage Current	I _{GSS}	V _{GS} = ±20V, V _{DS} =0V	-	-	±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D =-	-1.0	-1.5	-2.4	V
Static Drain-Source On-Resistance	R _{DS(on)}	V _{GS} =-10V, I _D =-10A	-	30	40	
		V _{GS} =-4.5V, I _D =-5A	-	45	60	
Diode Forward Voltage	V _{SD}	I _S =-10A, V _{GS} =0V	-	-	-1.2	V
Gate resistance	R _G	f=1MHz	-	17	-	
Maximum Body-Diode Continuous Current	I _S		-	-	-10	A
Dynamic Parameters						

Input Capacitance

C_{iss}

- 490

V_{DS}=-15V, V_{GS}=0V, f=1MHz



Typical Electrical and Thermal Characteristics Diagrams

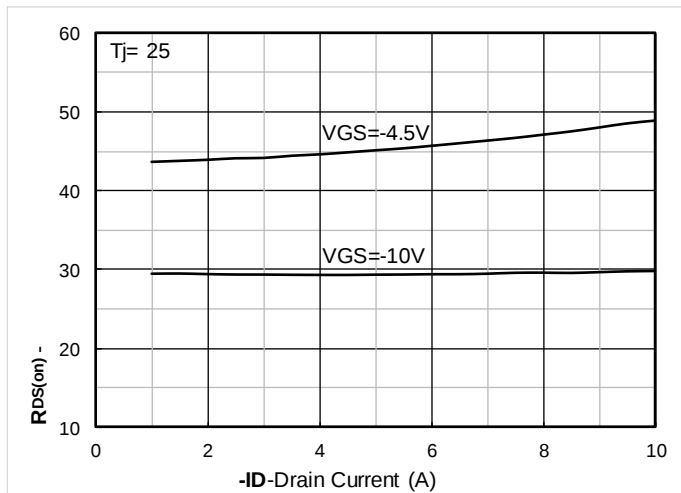


Figure 7. $R_{DS(on)}$ VS Drain Current



Figure 8. Forward characteristics of reverse diode

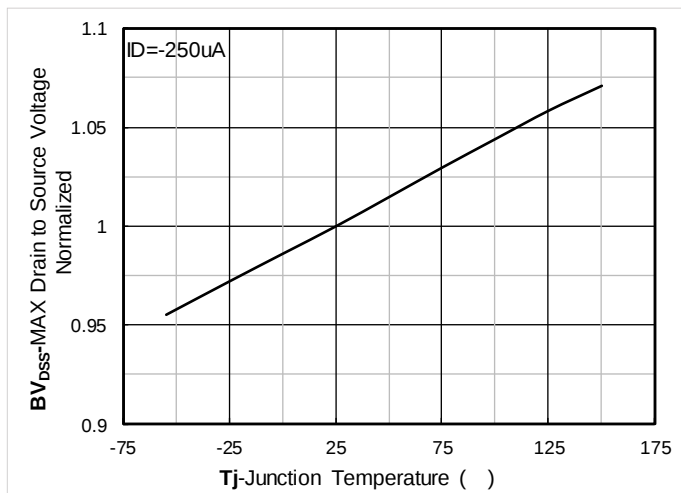


Figure 9. Normalized breakdown voltage

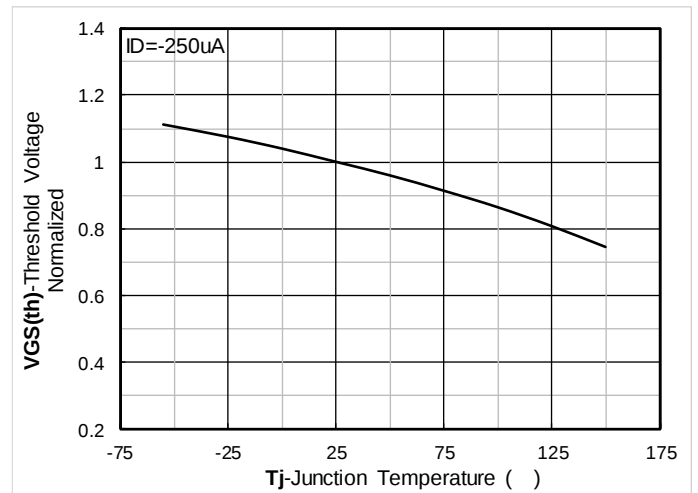


Figure 10. Normalized Threshold voltage

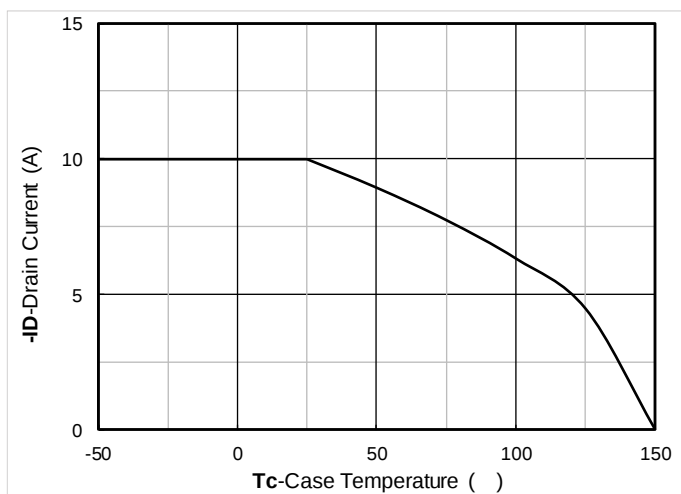


Figure 11. Current dissipation

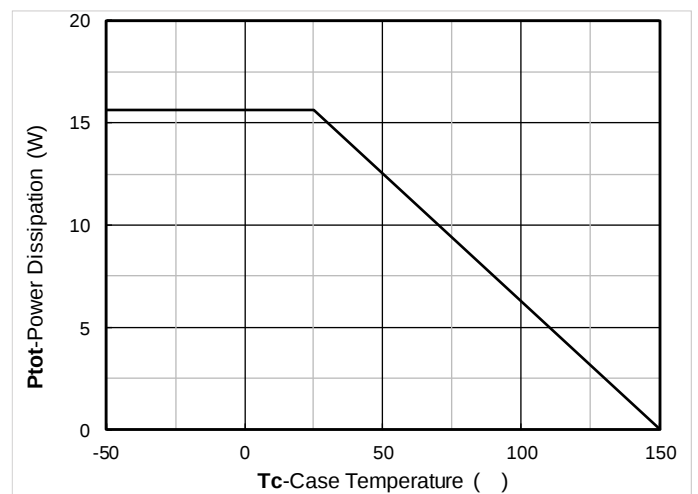


Figure 12. Power dissipation

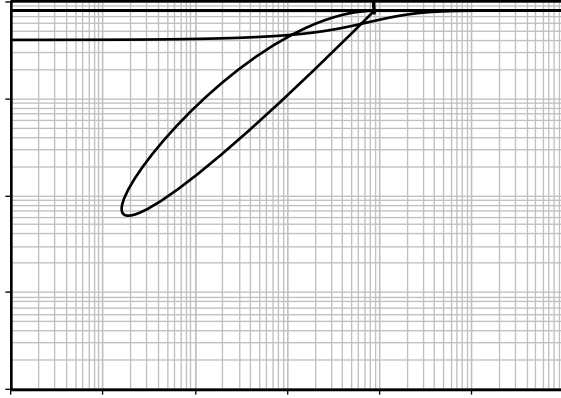


Figure 13. Maximum Transient Thermal Impedance

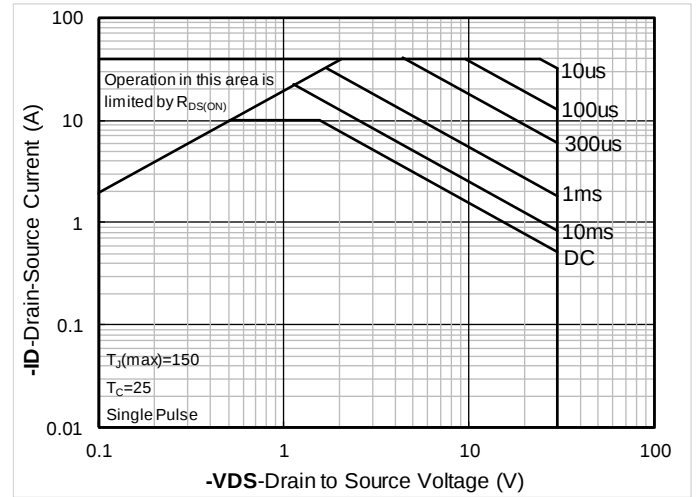


Figure 14



DFN2020-6L-E Package information

