



N-Channel Enhancement Mode Field Effect Transistor

Product Summary

- V_{DS} 100V
- I_D 56A
- $R_{DS(on)}$ (at $V_{GS}=10V$) $\varnothing 11m\Omega$
- $R_{DS(on)}$ (at $V_{GS}=4.5V$) $\varnothing 16m\Omega$
- 100% EAS Tested
- 100% j V_{DS} Tested

General Description

- Low $R_{DS(on)}$ & FOM
- Extremely low switching loss



YJB011G10AQ

■ Thermal resistance

Parameter		Symbol	Typ	Max	Units
Thermal Resistance Junction-to-Ambient ^D	Steady-State	$R_{\theta JA}$	35	42	- /W
Thermal Resistance Junction-to-Case	Steady-State	$R_{\theta JC}$	1.5	1.8	

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	Marking	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YJB011G10AQ	F1	YJB011G10A	800	/	8000	13"Reel

- A. Repetitive rating; pulse width limited by max. junction temperature.
B. $T_J=25^\circ\text{C}$, $V_{DD}=40\text{V}$, $V_G=10\text{V}$, $R_G=25\Omega$, $L=0.5\text{mH}$, $I_{AS}=20\text{A}$.
C. P_d is based on max. junction temperature, using junction-case thermal resistance.
D. The value of $R_{\theta JA}$

G			



■ Typical Electrical and Thermal Characteristics Diagrams

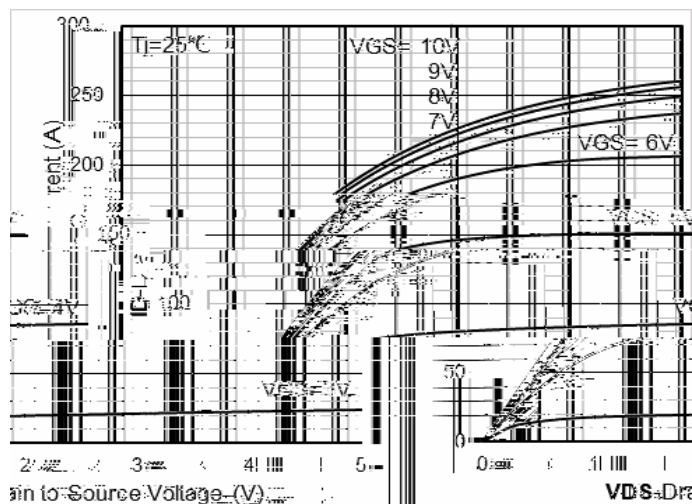


Figure 1. Output Characteristics

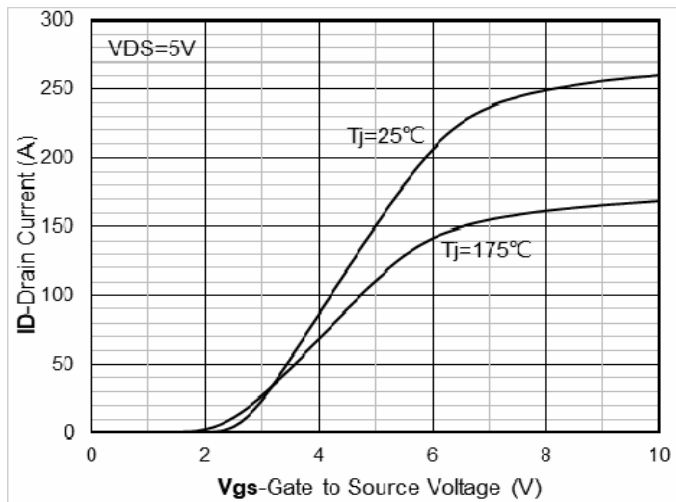
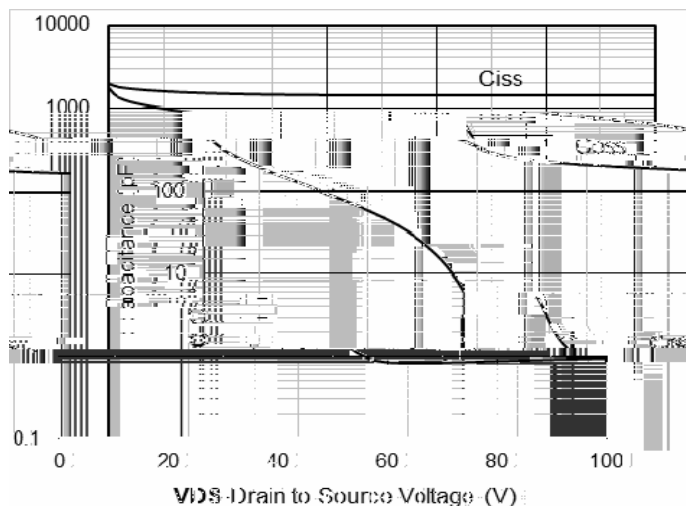


Figure 2. Transfer Characteristics



3. Capacitance Characteristics

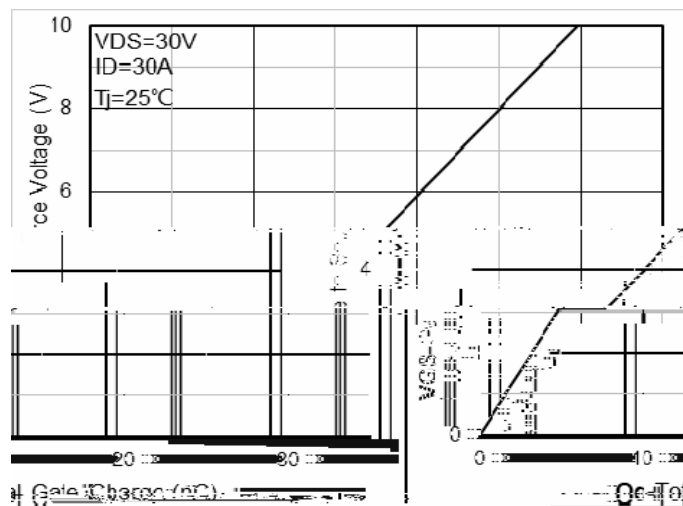


Figure 4. Gate Charge

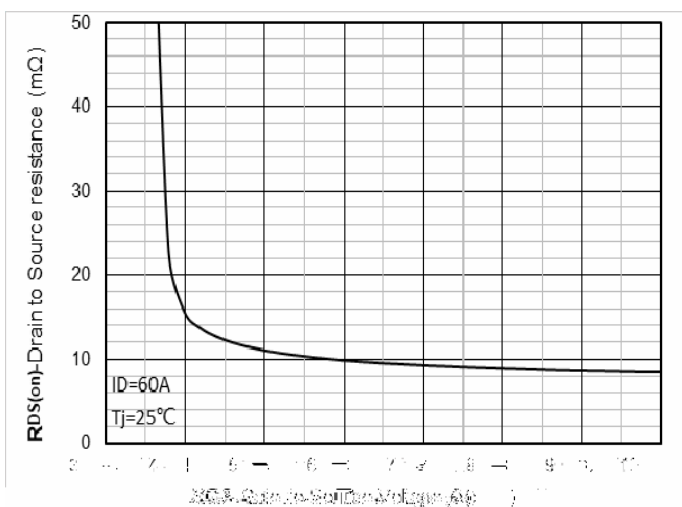


Figure 5. On-Resistance vs Gate to Source Voltage

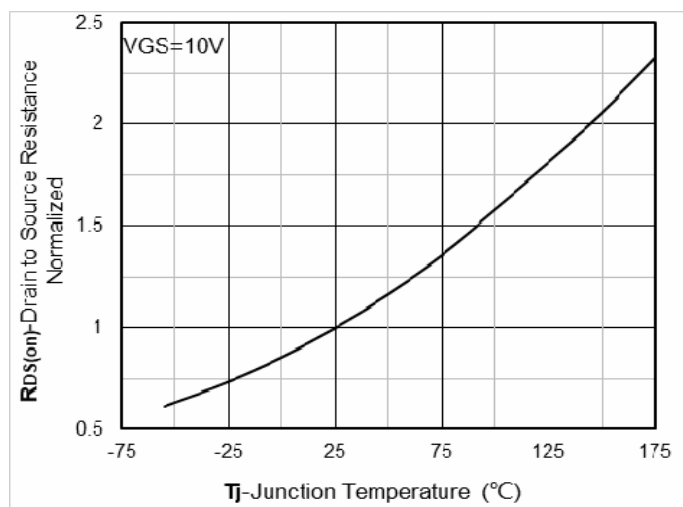


Figure 6. Normalized On-Resistance

< - % * \$ 4



Figure 13. Maximum Transient Thermal Impedance

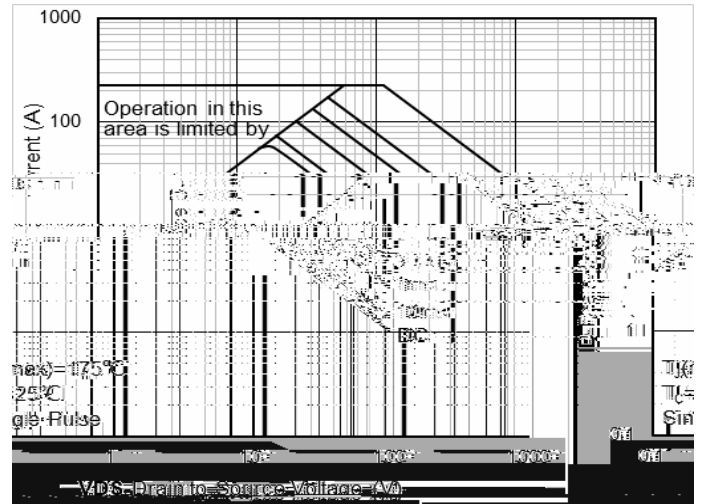


Figure 14. Safe Operation Area

