





# YJG120G10AR

## ■ Electrical Characteristics ( $T_J=25^\circ C$ unless otherwise noted)

| Parameter                         | Symbol       | Conditions                                | Min | Typ | Max | Units     |
|-----------------------------------|--------------|---|-----|-----|-----|-----------|
| <b>Static Parameter</b>           |              |   |     |     |     |           |
| Drain-Source Breakdown Voltage    | $BV_{DSS}$   | $V_{GS}=0V, I_D=250\mu A$                 | 100 | -   | -   | V         |
| Zero Gate Voltage Drain Current   | $I_{DSS}$    | $V_{DS}=100V, V_{GS}=0V$                  | -   | -   | 1   | $\mu A$   |
|                                   |              | $V_{DS}=100V, V_{GS}=0V, T_J=150^\circ C$ | -   | -   | 100 |           |
| Gate-Body Leakage Current         | $I_{GSS}$    | $V_{GS}=-20V, V_{DS}=0V$                  | -   | -   | 100 | nA        |
| Gate Threshold Voltage            | $V_{GS(th)}$ | $V_{DS}=V_{GS}, I_D=250\mu A$             | 1   | 1.8 | 2.5 | V         |
|                                   |              | $V_{GS}=10V, I_D=60A$                     | -   | 3.2 | 4   |           |
| Static Drain-Source On-Resistance | $R_{DS(on)}$ |   |     |     |     | $m\Omega$ |



**YJG120G10AR**

### Typical Electrical and Thermal Characteristics Diagrams

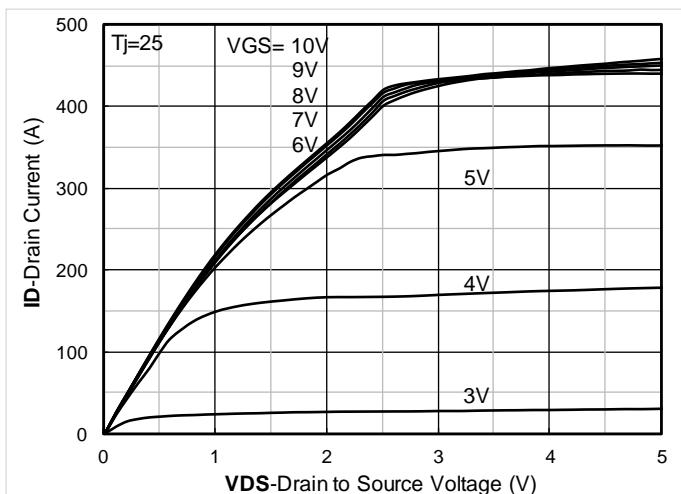


Figure1. Output Characteristics

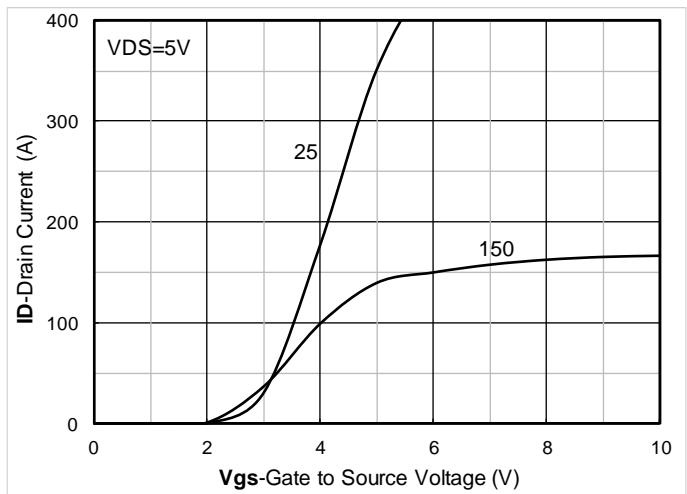


Figure2. Transfer Characteristics

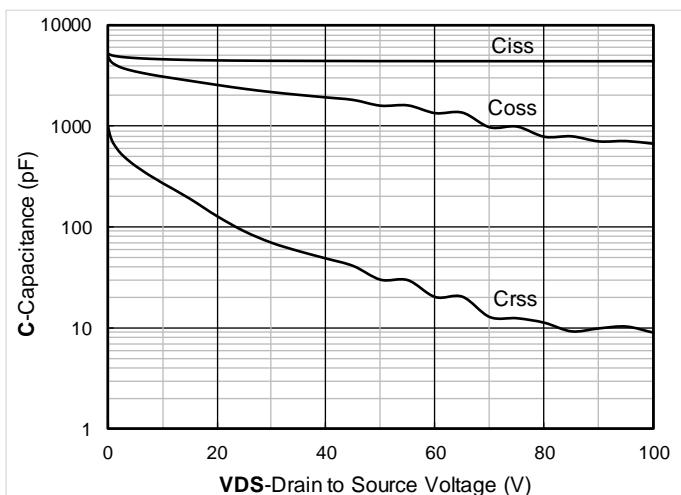


Figure3. Capacitance Characteristics

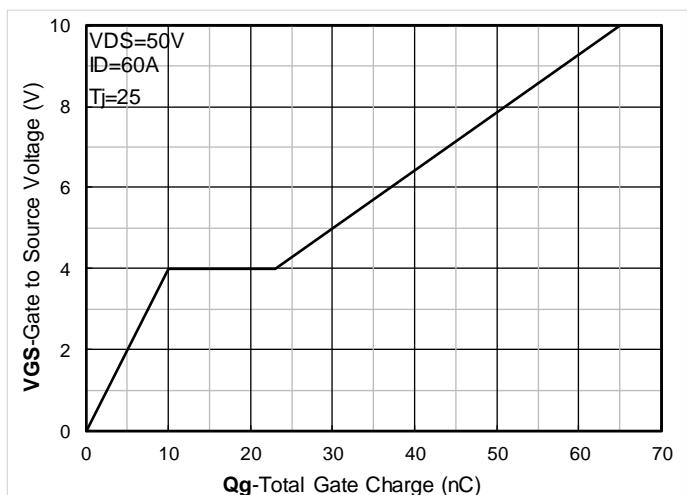


Figure4. Gate Charge

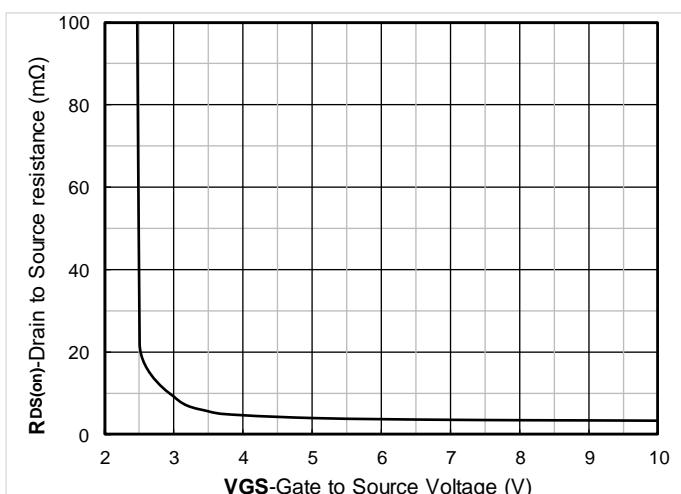


Figure5. On-Resistance vs Gate to Source Voltage

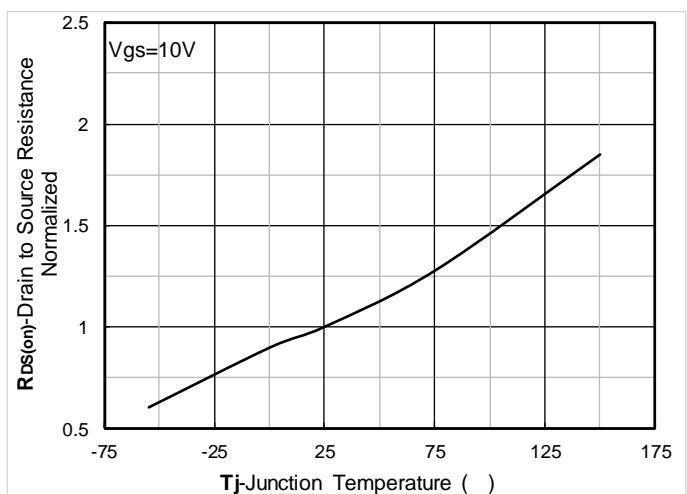


Figure6. Normalized On-Resistance

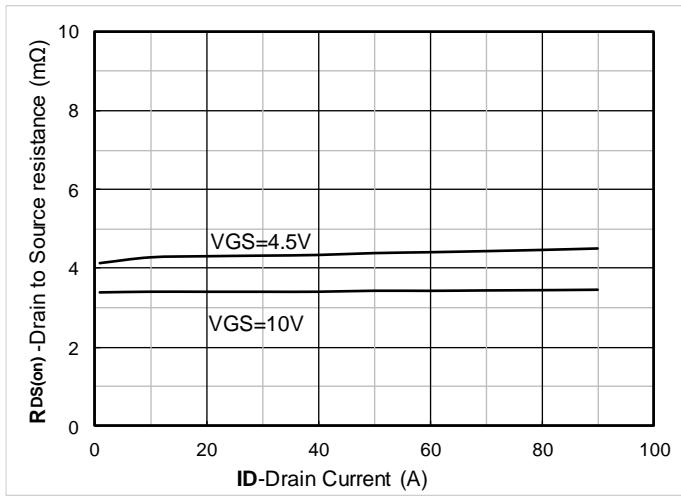


Figure7. RDS(on) VS Drain Current

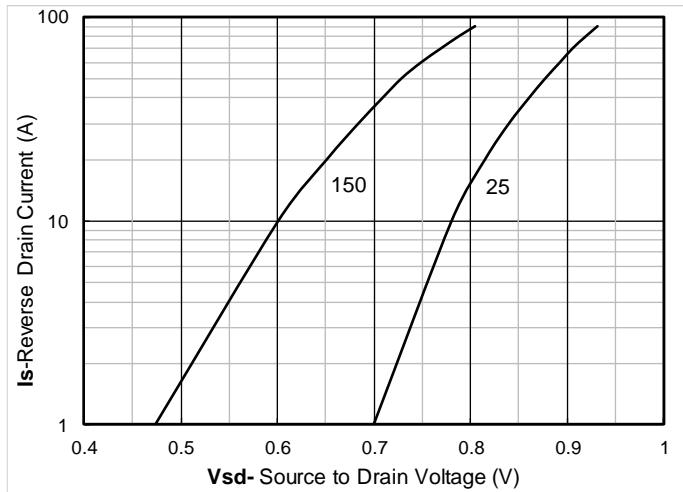


Figure8. Forward characteristics of reverse diode

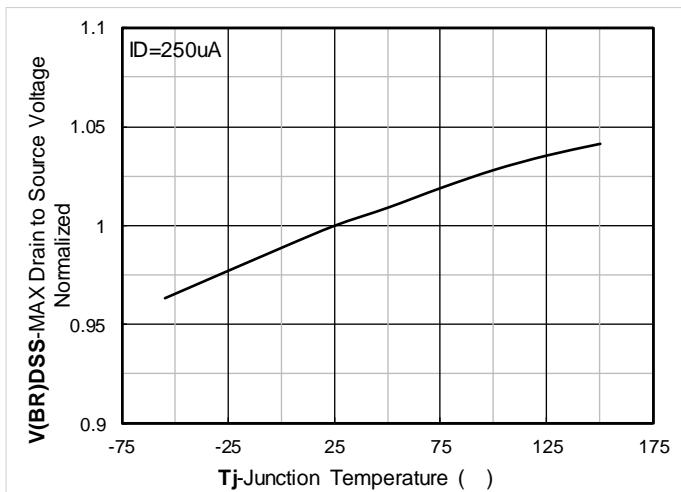


Figure9. Normalized breakdown voltage

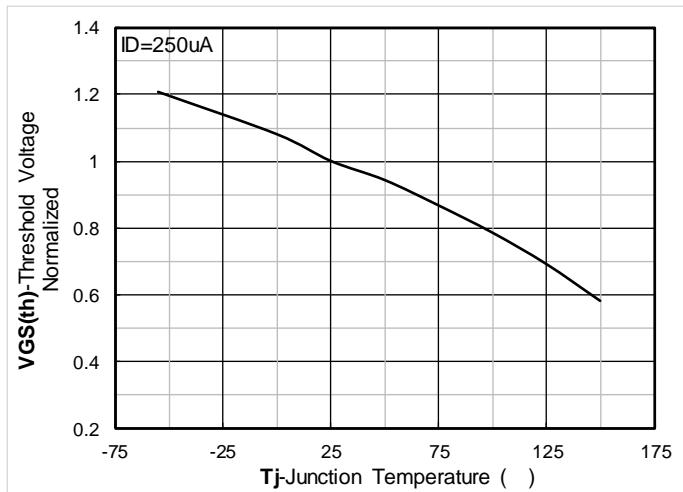


Figure10. Normalized Threshold voltage

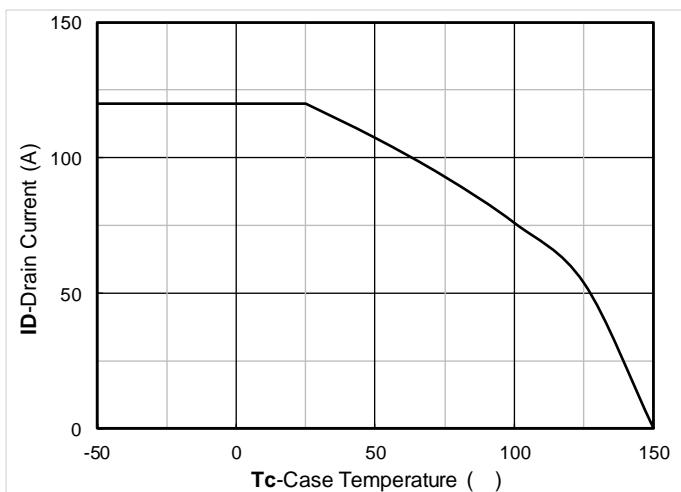


Figure11. Current dissipation

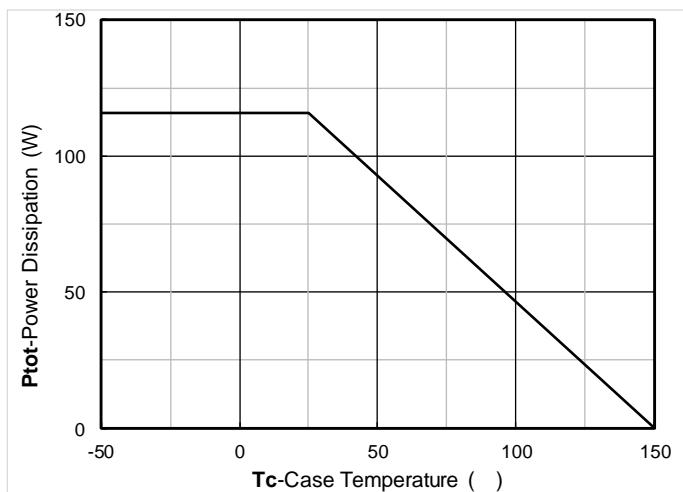


Figure12. Power dissipation

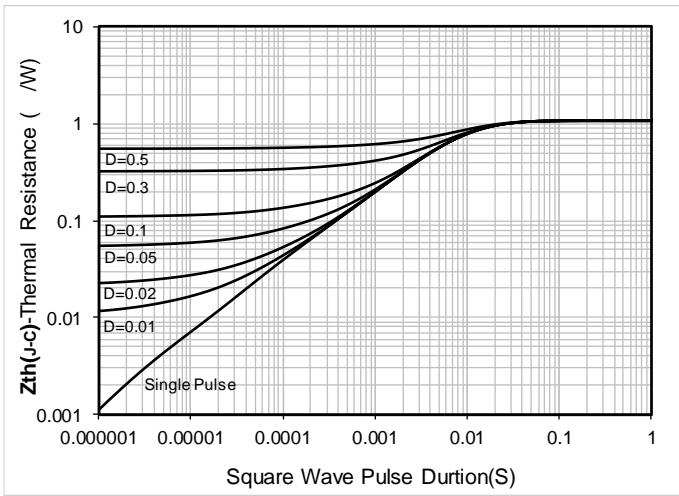


Figure13. Maximum Transient Thermal Impedance

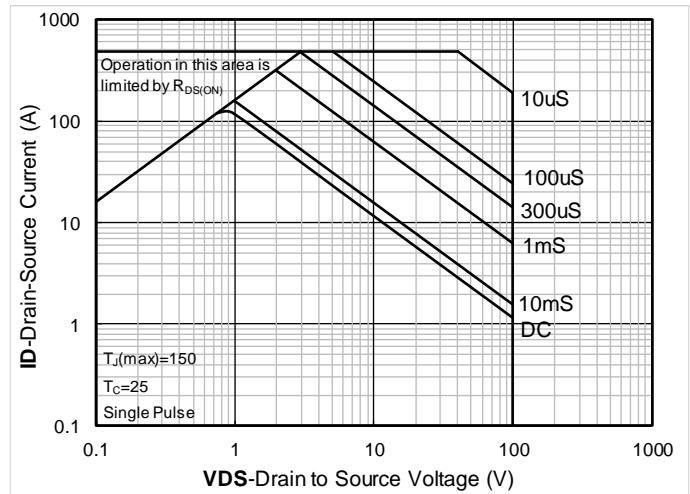
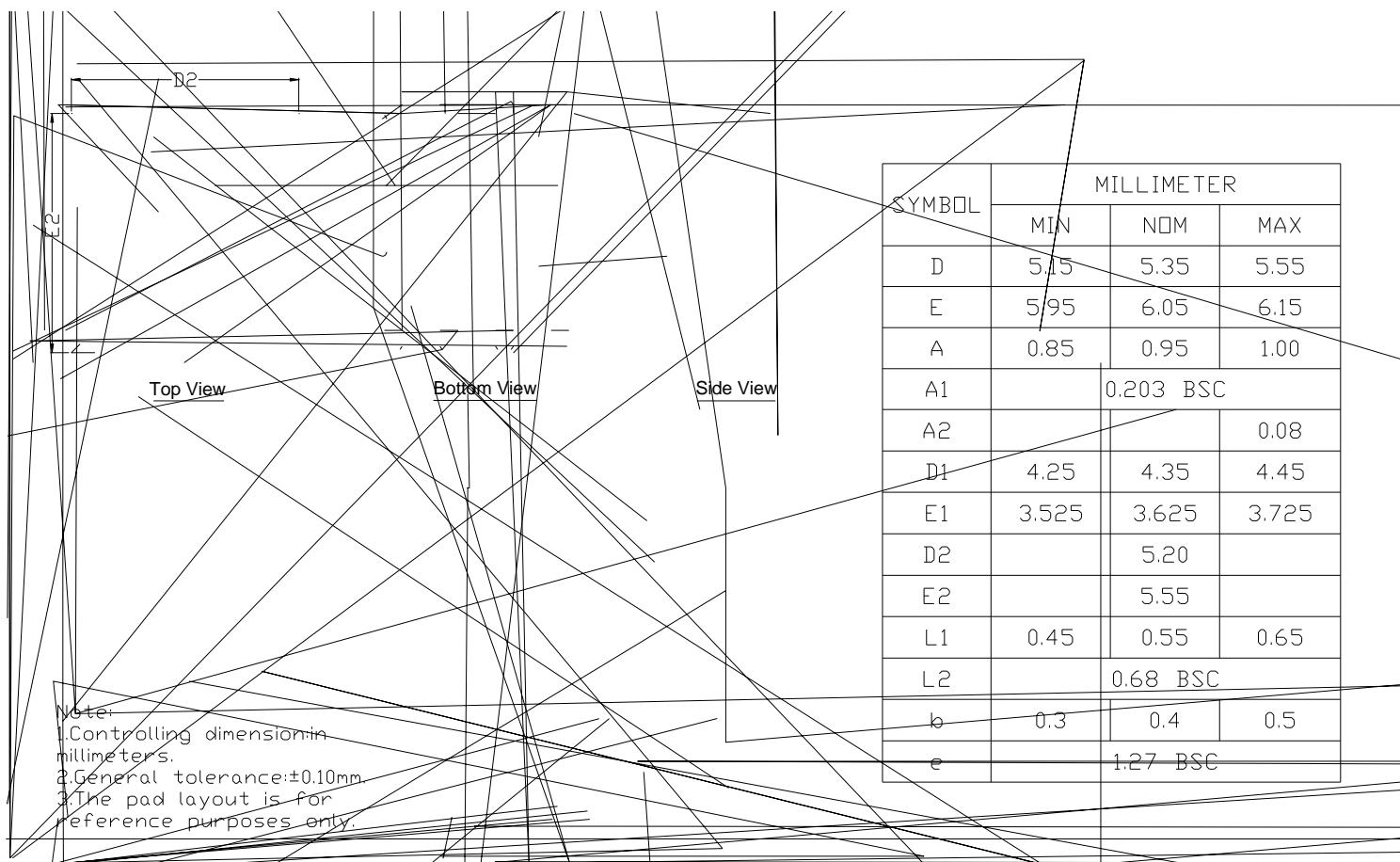


Figure14. Safe Operation Area



## ■ PDFN5060-8L-D-0.95MM Package information





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