

YJ



# YJG50N03B

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



Typical Performance Characteristics

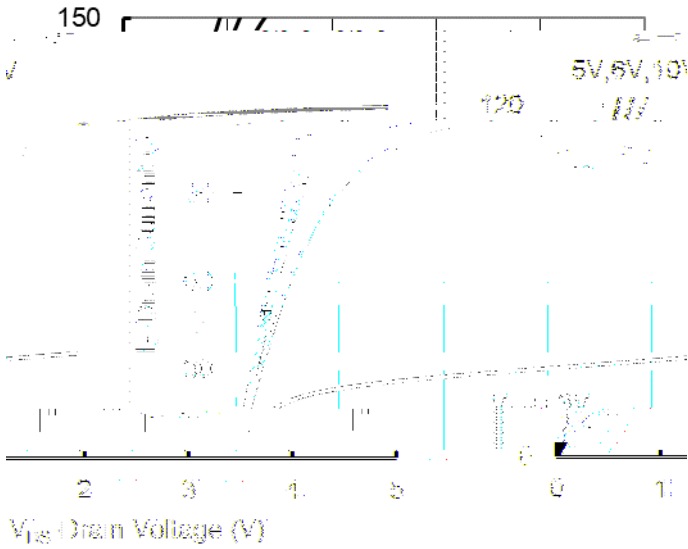


Figure 1. Output Characteristics

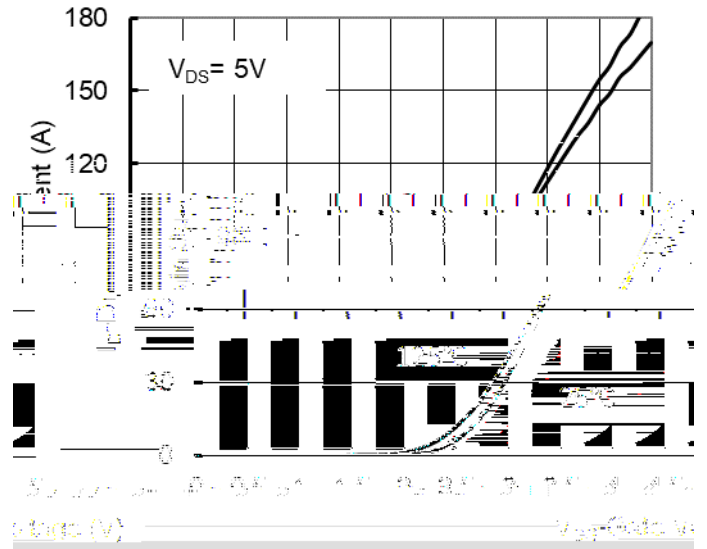


Figure 2. Transfer Characteristics

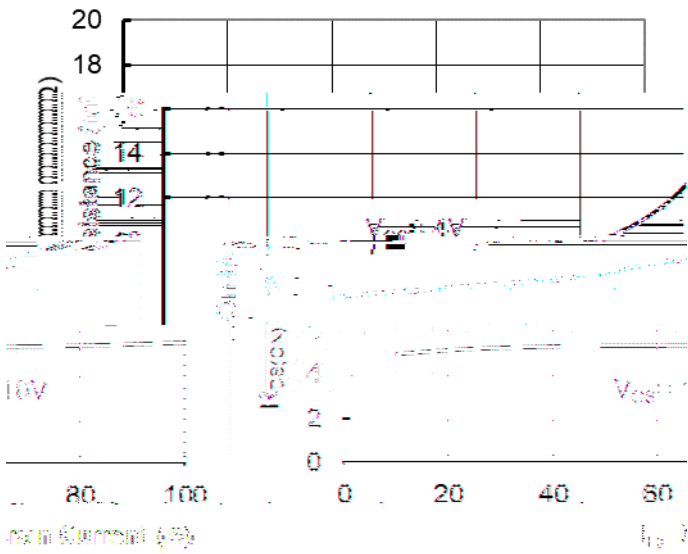


Figure 3. On-Resistance vs. Drain Current and Gate Voltage

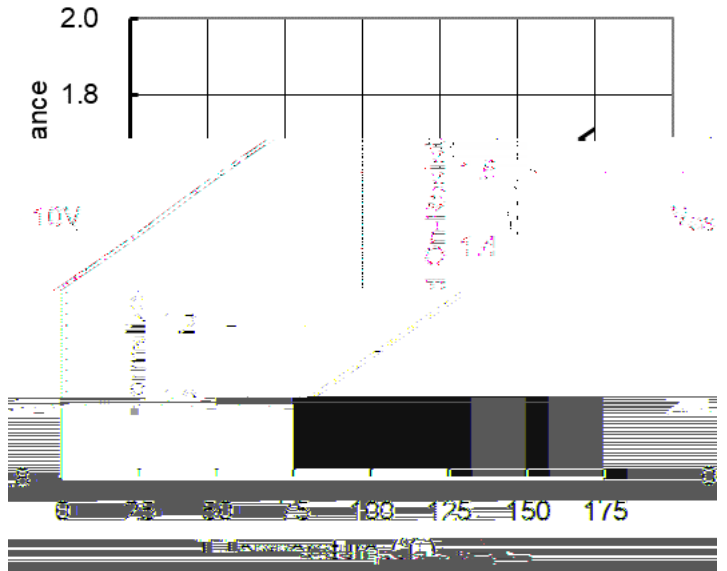


Figure 4. On-Resistance vs. Junction Temperature

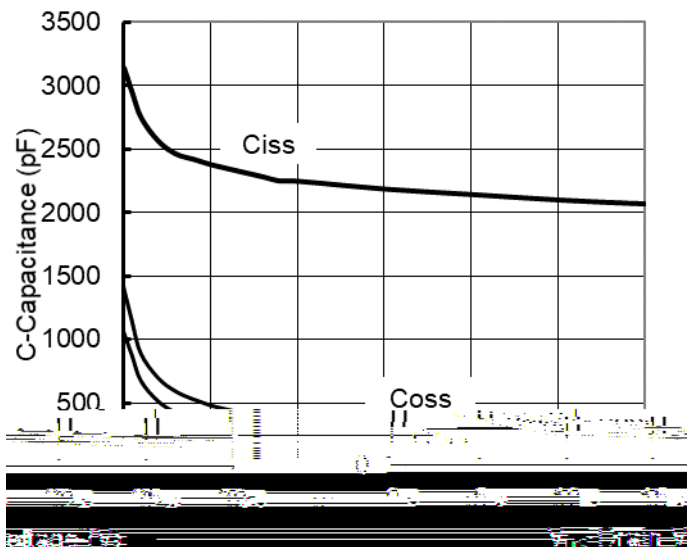


Figure 5. Capacitance Characteristics

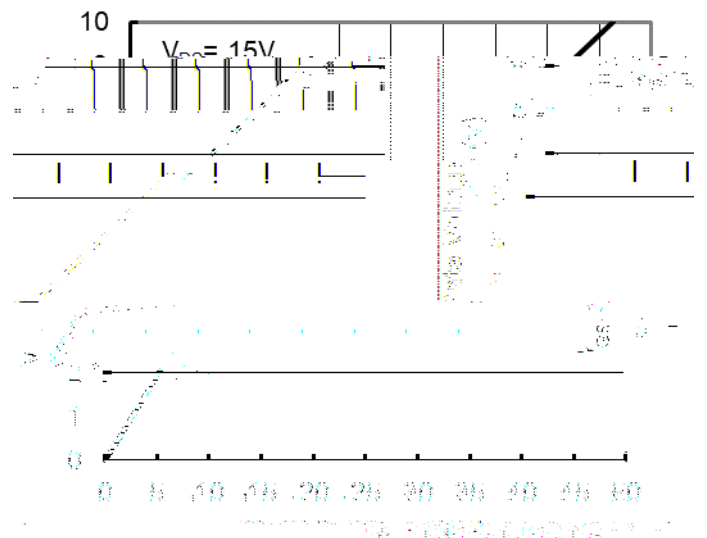
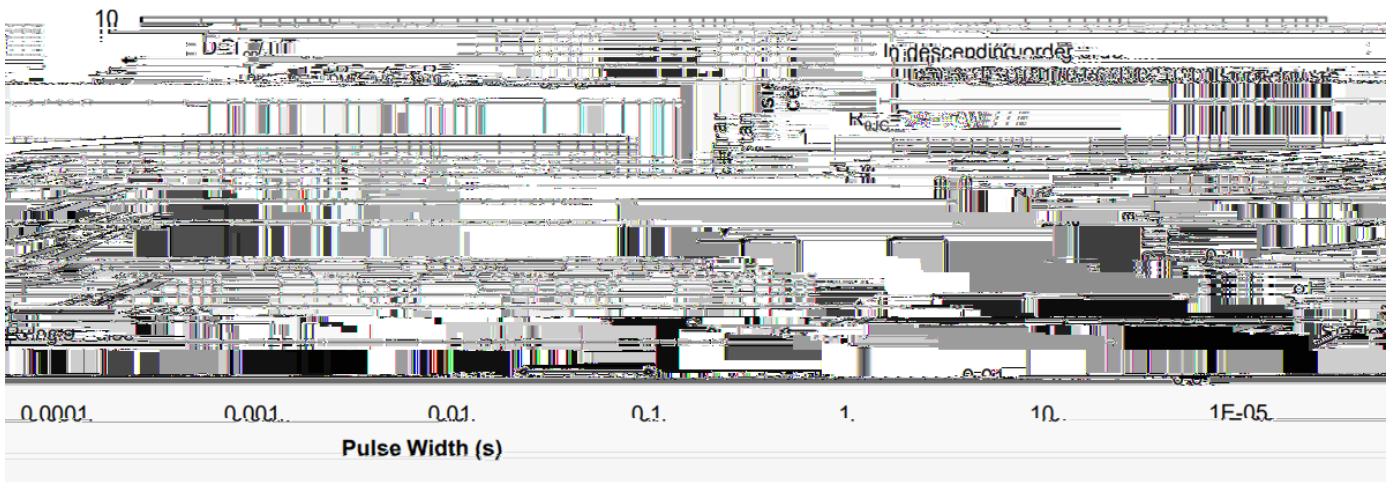


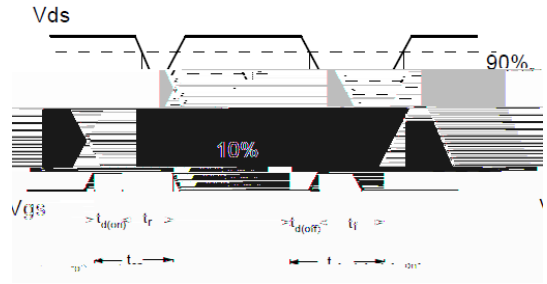
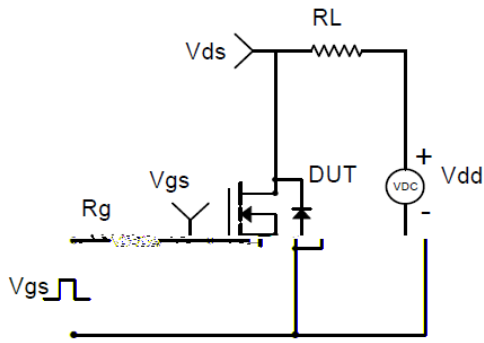
Figure 6. Gate Charge



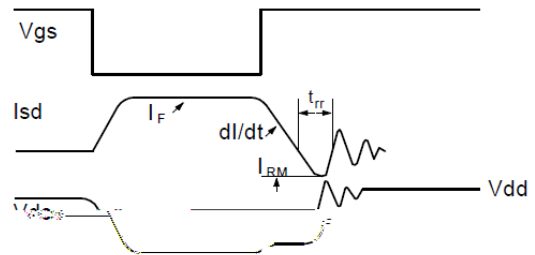
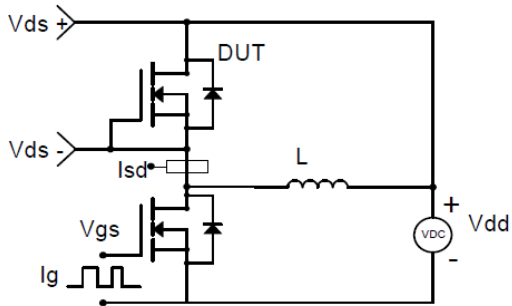
**Figure 7. Safe Operation Area**

**Figure 8. Maximum Continuous Drain Current vs Case Temperature**

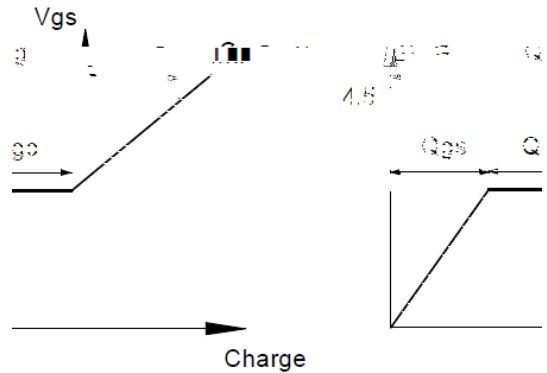




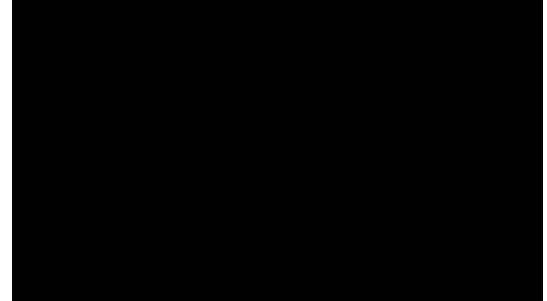
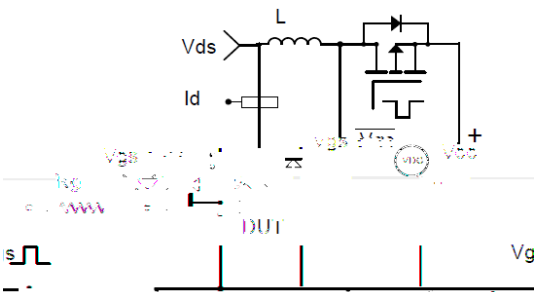
**Resistive Switching Test Circuit & Waveforms**



**Diode Recovery Test Circuit & Waveforms**



**Gate Charge Test Circuit & Waveform**

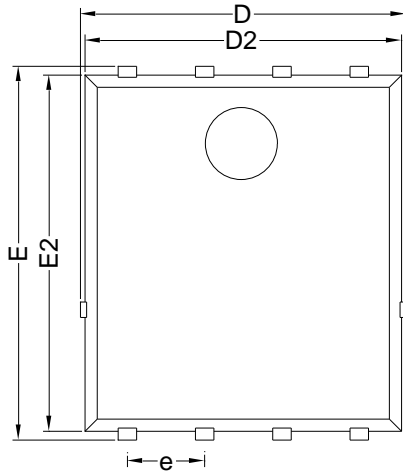


**Unclamped Inductive Switching (UIS) Test Circuit & Waveforms**

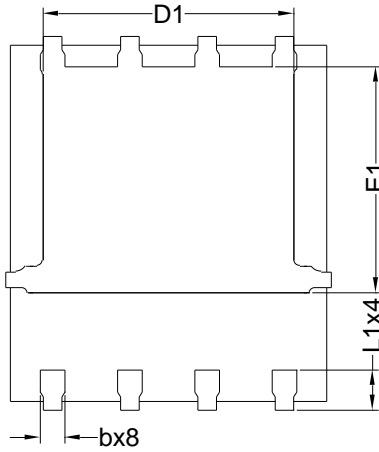


# YJG50N03B

## PDFN5060-8L-B-1.1MM Package Information



Top View



Bottom View

Side View

| SYMBOL | MILLIMETER |      |      |
|--------|------------|------|------|
|        | MIN        | NOM  | MAX  |
| D      | 5.15       | 5.35 | 5.55 |
| E      | 5.95       | 6.15 | 6.35 |
| A      | 1.00       | 1.10 | 1.20 |
| A1     | 0.254 BSC  |      |      |
| A2     |            |      | 0.10 |
| D1     | 3.92       | 4.12 | 4.32 |
| E1     | 3.52       | 3.72 | 3.92 |
| D2     | 5.00       | 5.20 | 5.40 |
| E2     | 5.66       | 5.86 | 6.06 |
| E3     | 0.254 REF  |      |      |
| E4     | 0.21 REF   |      |      |
| L1     | 0.56       | 0.66 | 0.76 |
| L2     | 0.50 BSC   |      |      |
| b      | 0.31       | 0.41 | 0.51 |
| e      | 1.27 BSC   |      |      |

Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.10$  mm.
3. The pad layout is for reference purposes only.



**Disclaimer**

TheQeQ2Th10p1(T0 n[rTf1 -Qq3 0 15)11(T)6n6(h10.)5(2)p[rT-QG[sG[nq3 0 (T0 G[dh10.)5(2)11(T)6(h10.)5(2)0 15)0 11(T)6s)260.)5(2)dh10