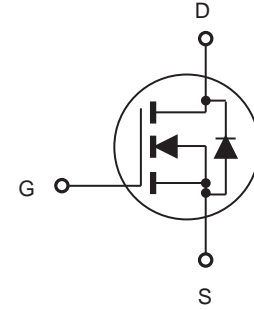


CEP70N06/CEB70N06

N-Channel Enhancement Mode Field Effect Transistor

FEATURES

- 60V, 70A, $R_{DS(ON)} = 13m\Omega$ @ $V_{GS} = 10V$.
- Super high dense cell design for extremely low $R_{DS(ON)}$.
- High power and current handling capability.
- Lead free product is acquired.
- TO-220 & TO-263 package.



ABSOLUTE MAXIMUM RATINGS $T_C = 25^\circ C$ unless otherwise noted

| Parameter | Symbol | Limit | Units |
|---|----------------|------------|---------------|
| Drain-Source Voltage | V_{DS} | 60 | V |
| Gate-Source Voltage | V_{GS} | ± 20 | V |
| Drain Current-Continuous | I_D | 70 | A |
| Drain Current-Pulsed ^a | I_{DM} | 280 | A |
| Maximum Power Dissipation @ $T_C = 25^\circ C$ - Derate above $25^\circ C$ | P_D | 150 | W |
| | | 1.0 | W/ $^\circ C$ |
| Single Pulsed Avalanche Energy ^d | E_{AS} | 480 | mJ |
| Single Pulsed Avalanche Current ^d | I_{AS} | 50 | A |
| Operating and Store Temperature Range | T_J, T_{stg} | -55 to 175 | $^\circ C$ |

Thermal Characteristics

| Parameter | Symbol | Limit | Units |
|---|-----------------|-------|--------------|
| Thermal Resistance, Junction-to-Case | $R_{\theta JC}$ | 1.0 | $^\circ C/W$ |
| Thermal Resistance, Junction-to-Ambient | $R_{\theta JA}$ | 62.5 | $^\circ C/W$ |

[查询"CEB70N06"供应商](#)



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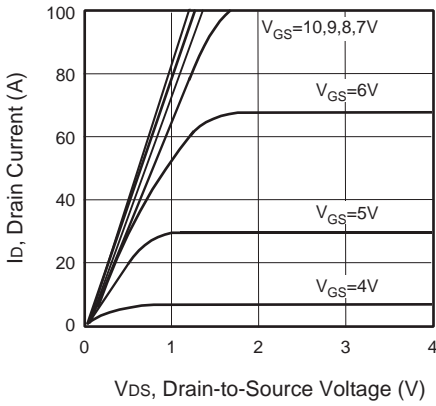


Figure 1. Output Characteristics

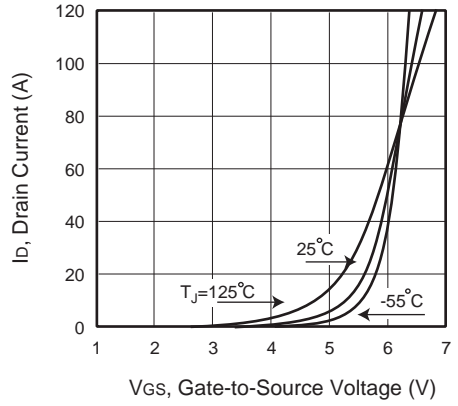


Figure 2. Transfer Characteristics

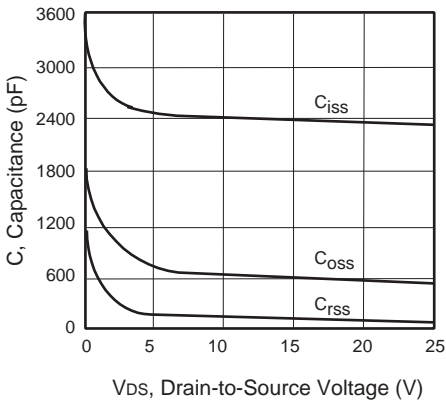


Figure 3. Capacitance

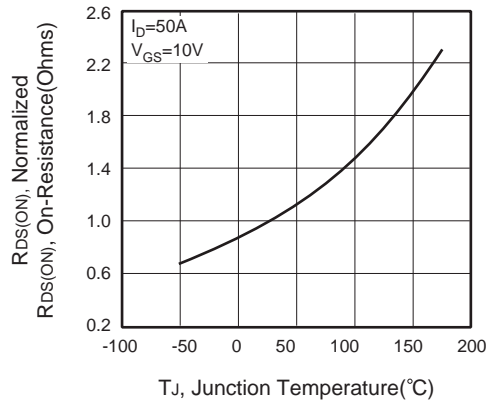


Figure 4. On-Resistance Variation with Temperature

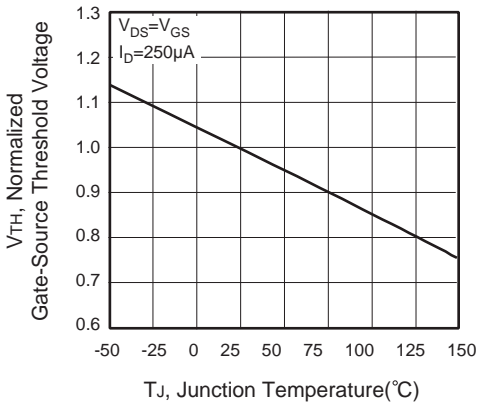


Figure 5. Gate Threshold Variation with Temperature

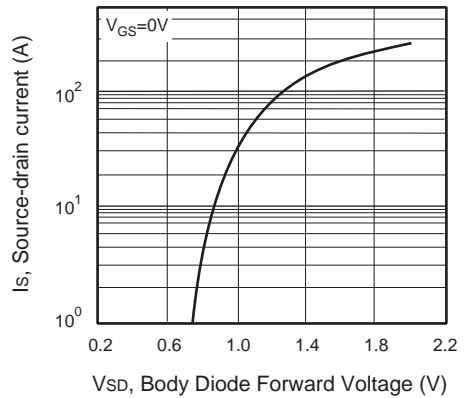


Figure 6. Body Diode Forward Voltage Variation with Source Current



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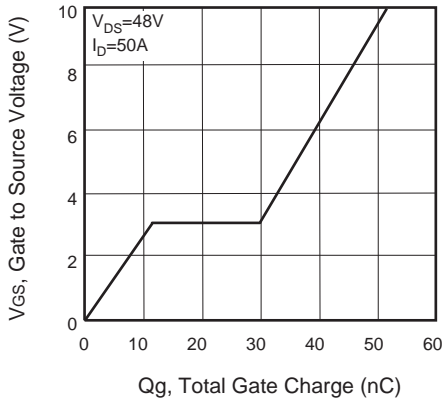


Figure 7. Gate Charge

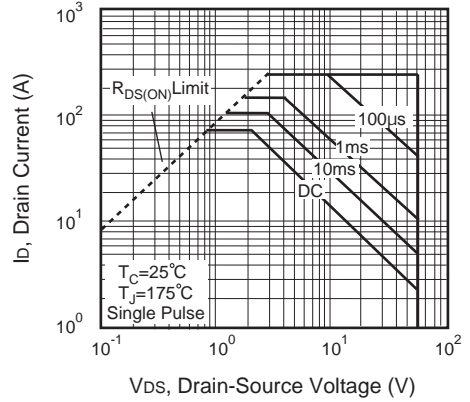


Figure 8. Maximum Safe Operating Area

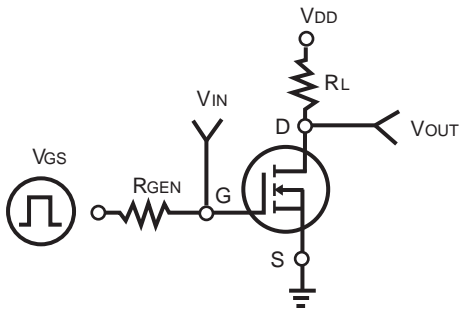


Figure 9. Switching Test Circuit

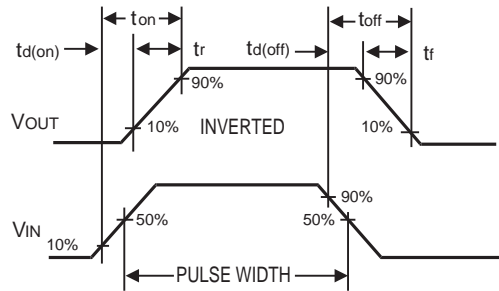


Figure 10. Switching Waveforms

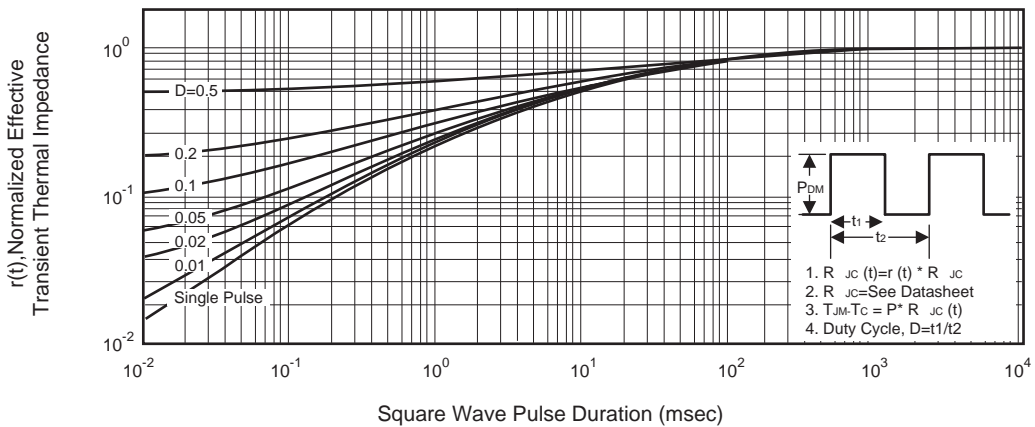


Figure 11. Normalized Thermal Transient Impedance Curve