

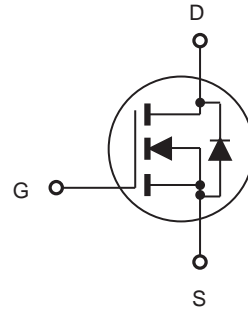
CEP09N7A/CEB09N7A CEF09N7A

N-Channel Enhancement Mode Field Effect Transistor

FEATURES

Type	V _{DSS}	R _{DS(ON)}	I _D	@V _{GS}
CEP09N7A	700V	1.2Ω	8A	10V
CEB09N7A	700V	1.2Ω	8A	10V
CEF09N7A	700V	1.2Ω	8A ^e	10V

- Super high dense cell design for extremely low R_{DS(ON)}.
- High power and current handling capability.
- Lead free product is acquired.



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

Parameter	Symbol	Limit		Units
		TO-220/263	TO-220F	
Drain-Source Voltage	V _{DS}	700		V
Gate-Source Voltage	V _{GS}	±30		V
Drain Current-Continuous	I _D	8	8 ^e	A
Drain Current-Pulsed ^a	I _{DM} ^f	30	30 ^e	A
Maximum Power Dissipation @ T _C = 25°C - Derate above 25°C	P _D	167	50	W
		1.33	0.4	W/°C
Operating and Store Temperature Range	T _J , T _{stg}	-55 to 150		°C

Thermal Characteristics

Parameter	Symbol	Limit		Units
Thermal Resistance, Junction-to-Case	R _{θJC}	0.75	2.5	°C/W
Thermal Resistance, Junction-to-Ambient	R _{θJA}	62.5	65	°C/W

[查询"CEB09N7A"供应商](#)



CEP09N7A/CEB09N7A CEF09N7A

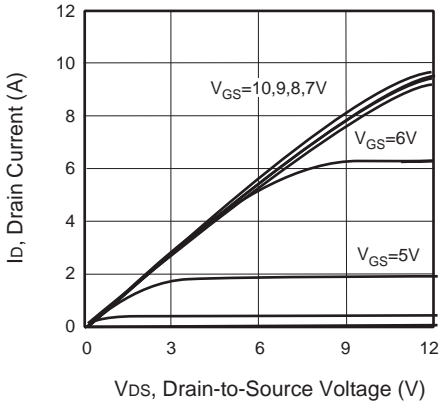


Figure 1. Output Characteristics

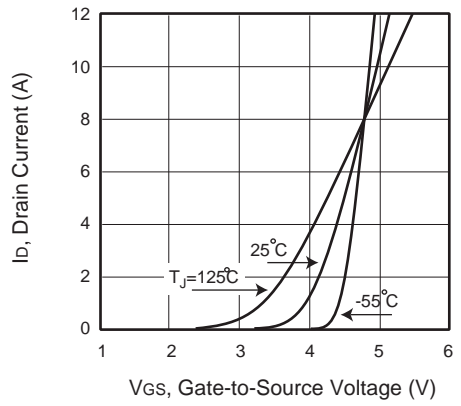


Figure 2. Transfer Characteristics

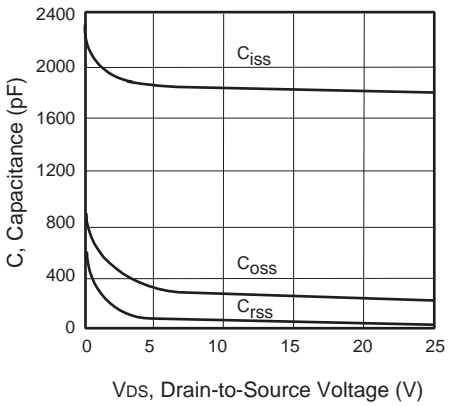


Figure 3. Capacitance

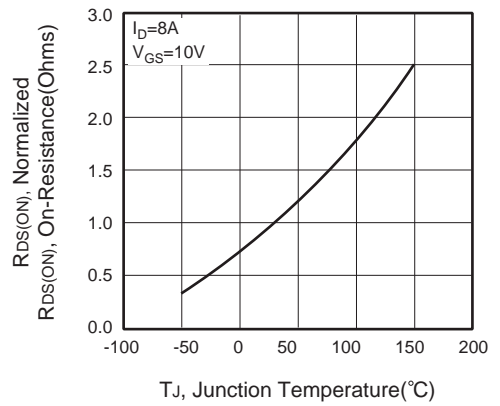


Figure 4. On-Resistance Variation with Temperature

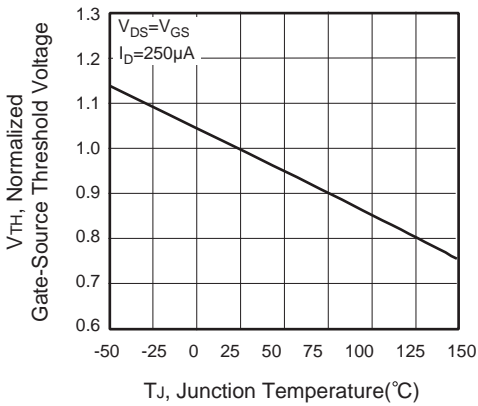


Figure 5. Gate Threshold Variation with Temperature

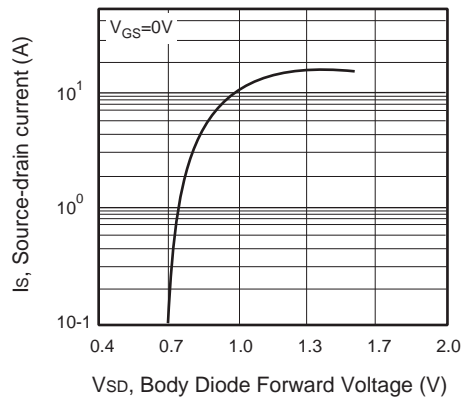


Figure 6. Body Diode Forward Voltage Variation with Source Current



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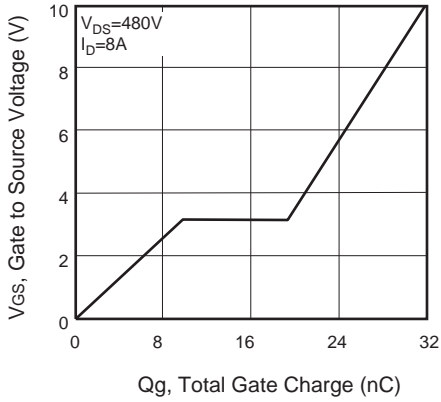


Figure 7. Gate Charge

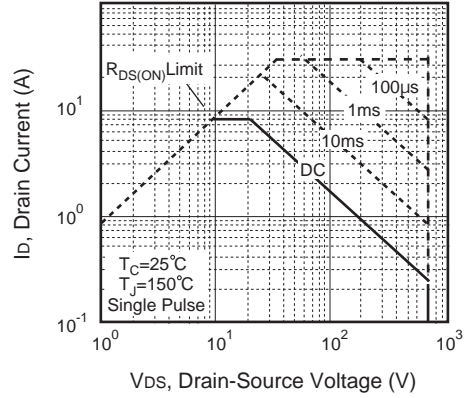


Figure 8. Maximum Safe Operating Area

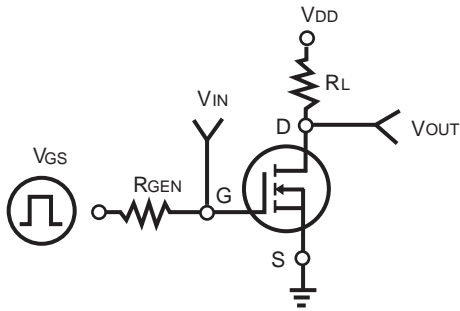


Figure 9. Switching Test Circuit

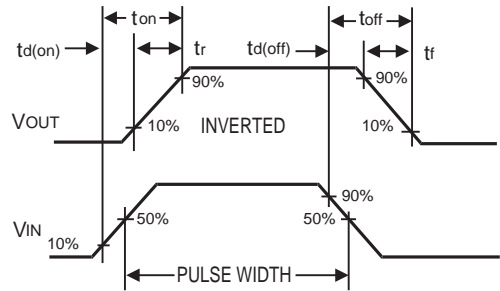


Figure 10. Switching Waveforms

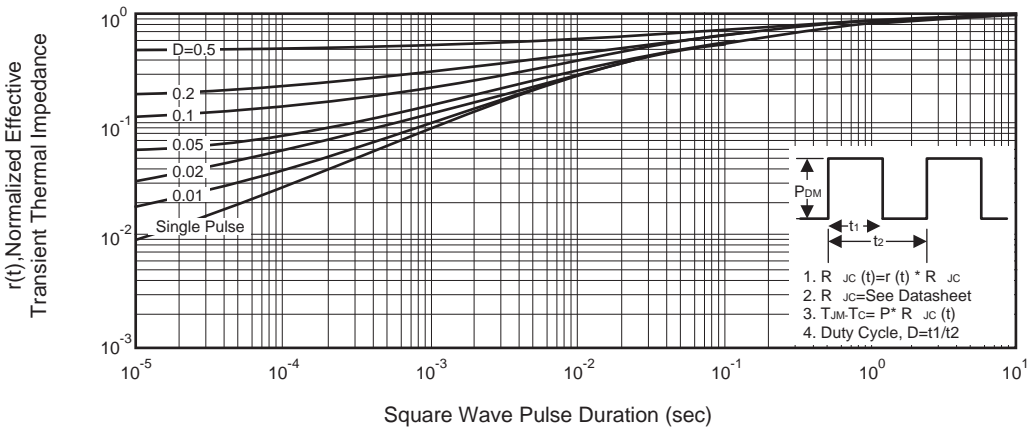


Figure 11. Normalized Thermal Transient Impedance Curve