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onsemi™



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Maximum Ratings

Symbol	Value	Units
V_{DS}	1700	V
	-20 to +3	V
	-30 to +20	V
I_{DM}	6.8	A
	5.1	A
P_{tot}	16	A
$T_{J,max}$	68	W
T_J, T_{STG}	175	°C
T_{solder}	-55 to 175	°C
	245	°C

1. +20V AC rating applies for turn-on pulses <200ns applied with external B



Electrical Characteristics ($T_J = +25^\circ\text{C}$ unless otherwise specified)

Typical Performance - Static

	Min	Typ	Max	
BV_{DS}	1700			V
		2.2	60	
		9		
		0.15	6	



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Figure 9. Threshold voltage vs. junction temperature at $V_{DS} = 5V$ and $I_D = 4.5mA$

Figure 10. Typical stored energy in C_{SS} at $V_{GS} = -20V$

Figure 11. Total power Dissipation

Figure 12. Safe operation area a



Figure 13. Typical gate leakage at $V_{DS} = 0V$

Figure 14. Typical gate forward current at $V_{DS} = 0V$

Figure 15. Maximum transient thermal impedance

Figure 16. Typical gate charge at $V_{GS} = 1200V$ and $I_b =$

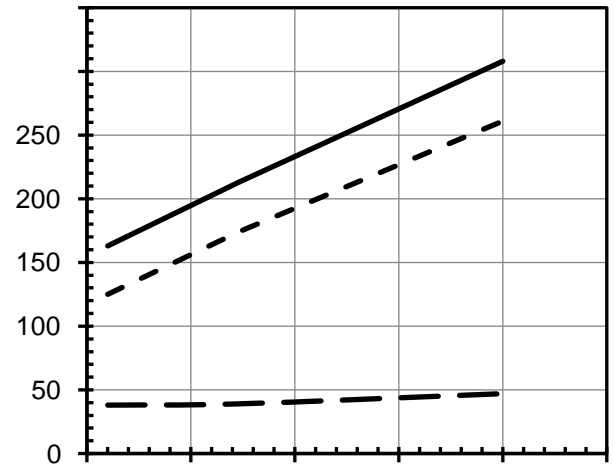


Figure 17. Clamped inductive switching energy vs. drain current at $T_J = 25^\circ\text{C}$

Figure 18. Clamped inductive switching energy vs. gate resistor R_G

Figure 19. Clamped inductive switching energy vs. junction temperature at $V_{DS} = 1200\text{V}$ and $I_D = 5\text{A}$



Disclaimer

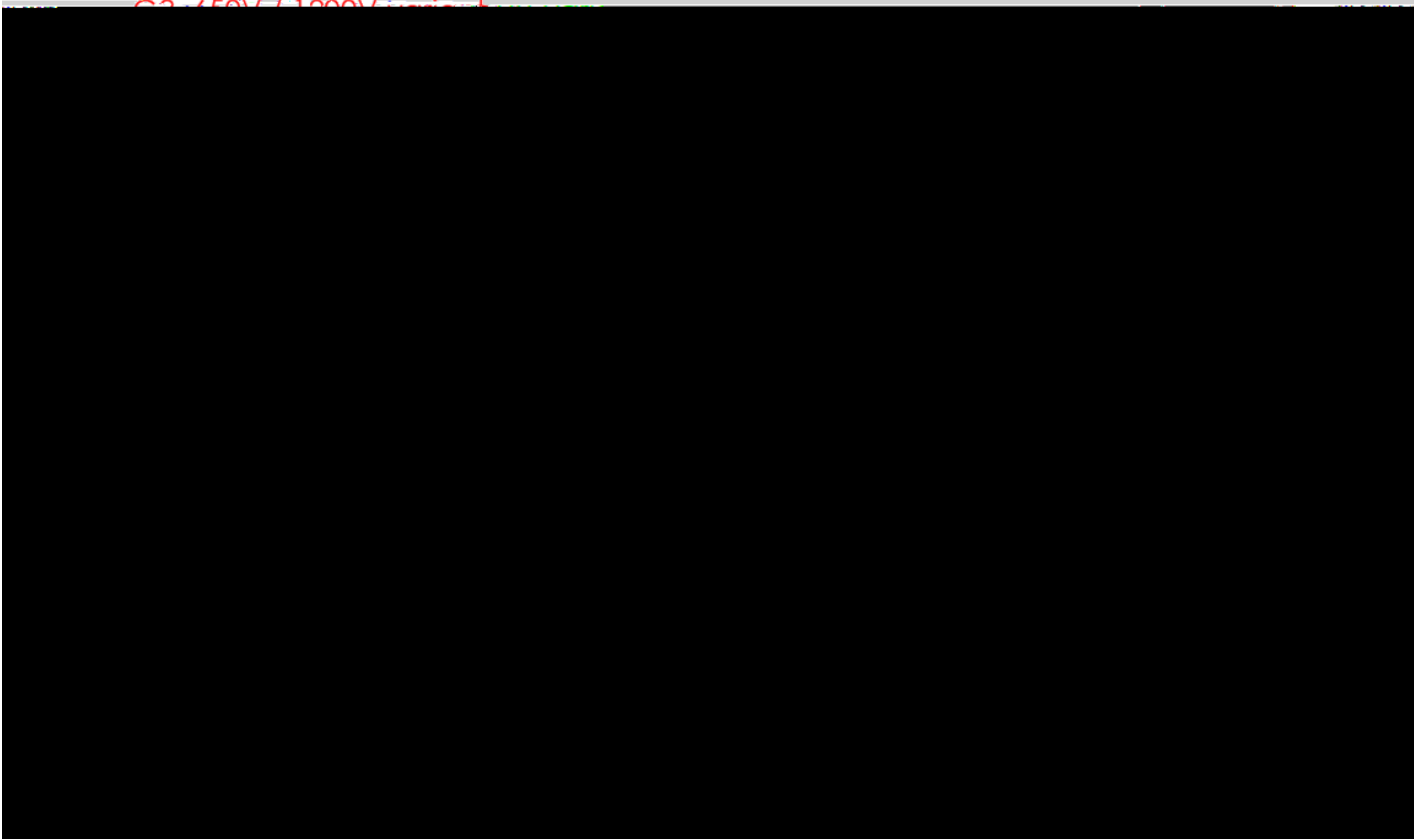
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