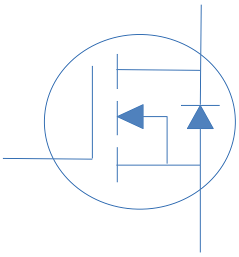
150V N-Ch Power MOSFET

V_{DS}	150	V
$R_{DS(on),typ}$	3.8	m
$I_{D\ (Sillicon\ Limited)}$	239	A



Part Number	Package	Marking
HGT041N15S	TOLL	GT041N15S

Absolute Maximum Ratings at T_j 0 l c f c c nc dc

Parameter	Symbol	Conditions	Value	Unit
Continuous Drain Current (Silicon Limited)	I_D	T_C 0	239	A
		T_C /	128	
Drain to Source Voltage	V_{DS}	-	150	V
Gate to Source Voltage	V_{GS}	-	20	V
Pulsed Drain Current	I_{DM}	-	800	A
Avalanche Energy, Single Pulse	E_{AS}	L=0.4mH, T_C 0	720	mJ
Power Dissipation	P_D	T_C 0	600	W
Operating and Storage Temperature	T_J, T_{stg}	-	-55 to175	

Absolute Maximum Ratings

Parameter	Symbol	Max	Unit
Thermal Resistance Junction-Case	$R\ _A$	0.25	
Thermal Resistance Junction-Ambient	R	60	

	typ	max
Drain to Source Breakdown Voltage	-	
		4
	-	1
	-	100

Figure 7. Typical Gate-Charge vs. Gate-to-Source Voltage

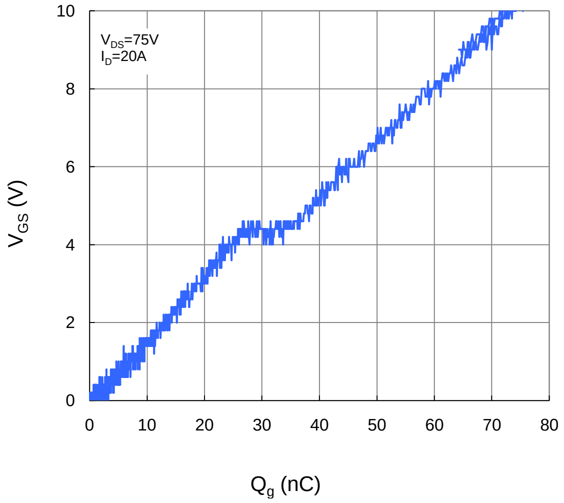


Figure 8. Typical Capacitance vs. Drain-to-Source Voltage

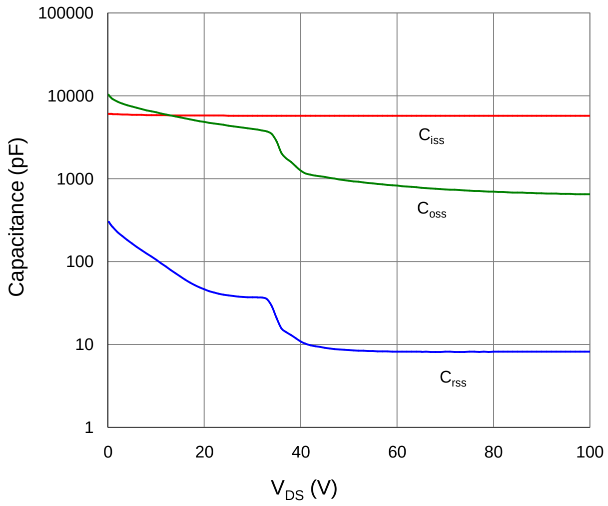


Figure 9. Maximum Safe Operating Area

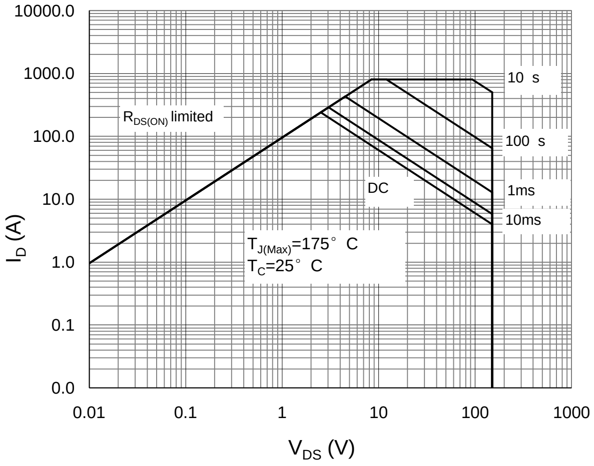


Figure 10. Maximun Drain Current vs. Case Temperature

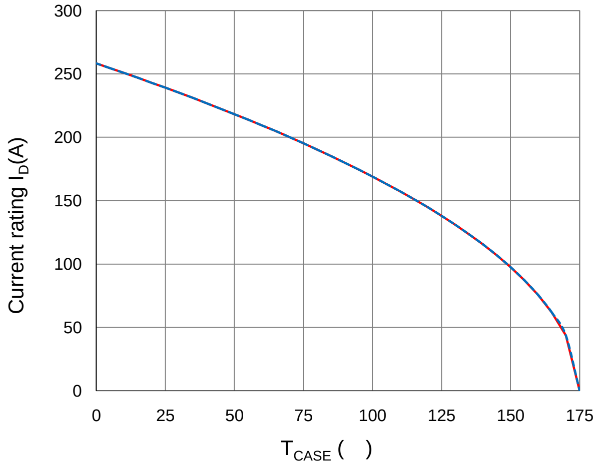
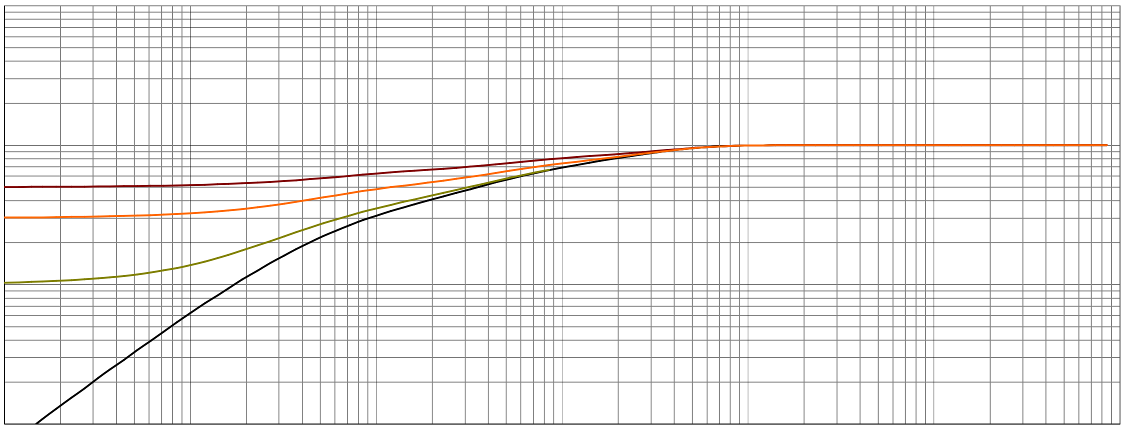
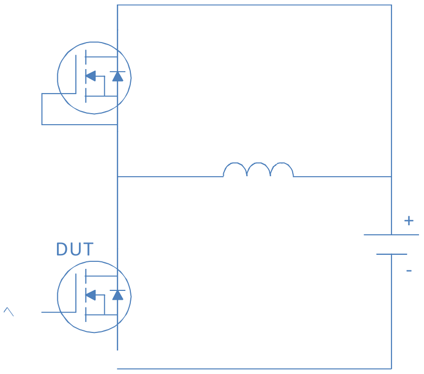
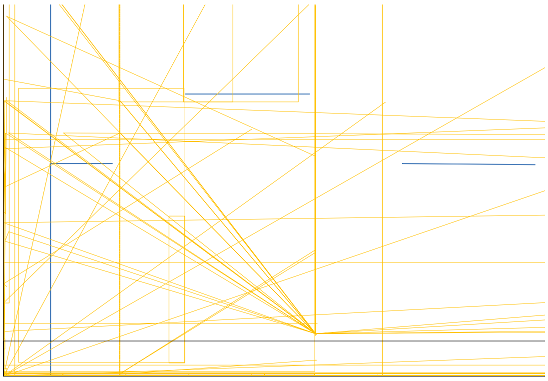


Figure 11. Normalized Maximum Transient Thermal Impedance, Junction-to-Case



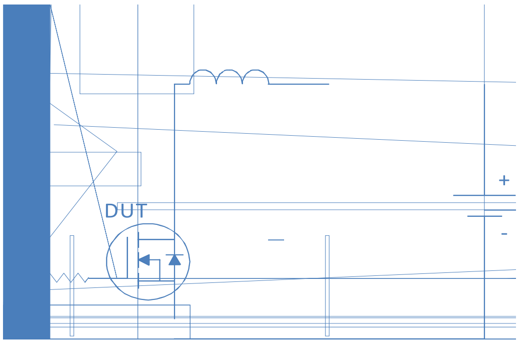
Inductive switching Test

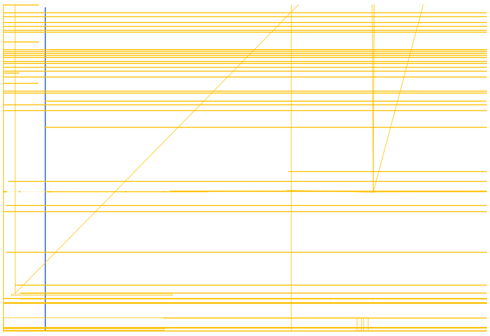




Gate Charge Test

Uclamped Inductive Switching (UIS) Test





Diode Recovery Test