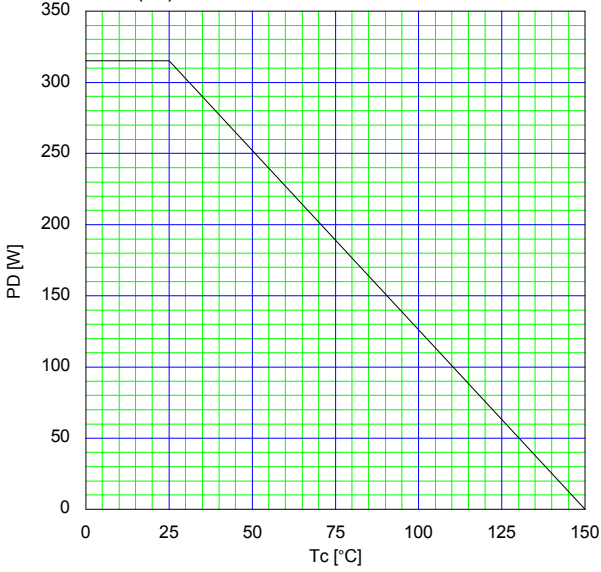
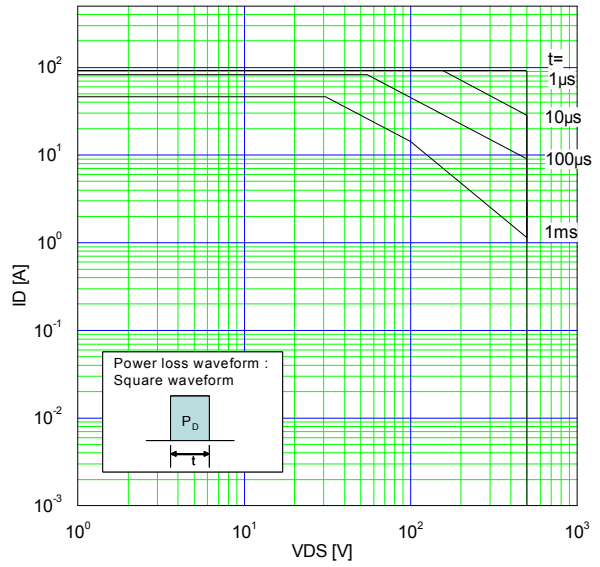




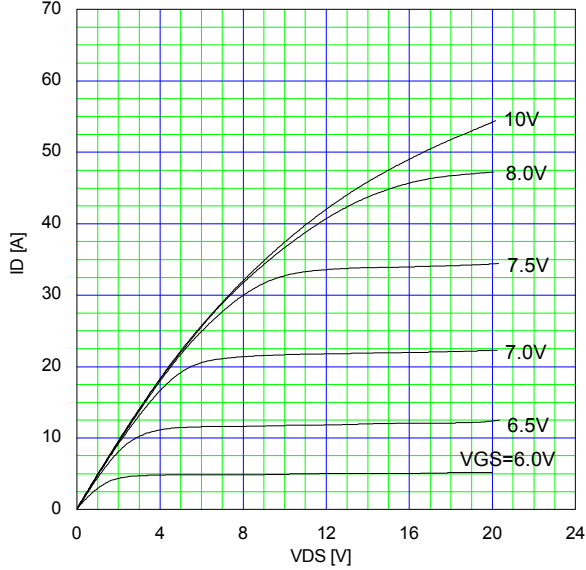
Allowable Power Dissipation  
 $P_D = f(T_c)$



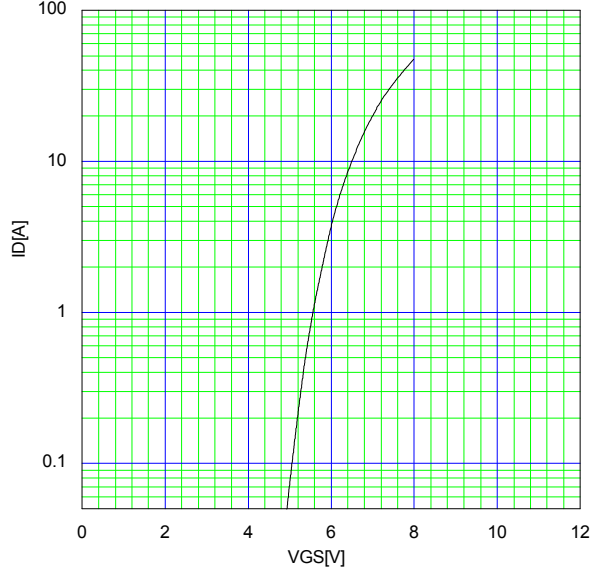
Safe Operating Area  
 $I_D = f(V_{DS}): \text{Duty}=0 (\text{Single pulse}), T_c=25^\circ\text{C}$



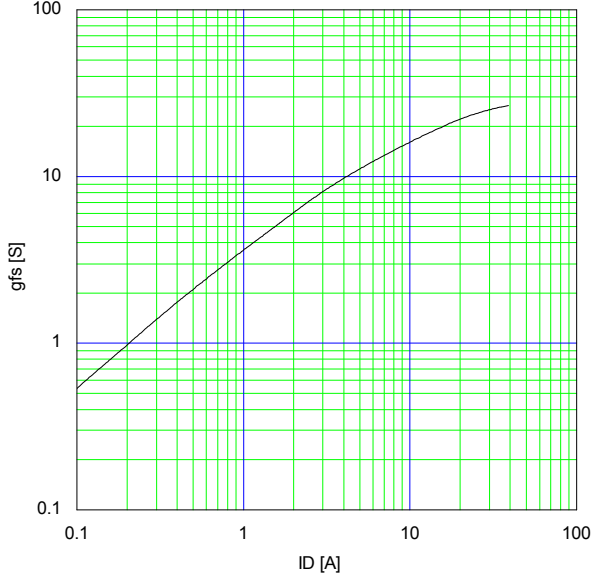
Typical Output Characteristics  
 $I_D = f(V_{DS}): 80\ \mu\text{s pulse test}, T_{ch}=25^\circ\text{C}$



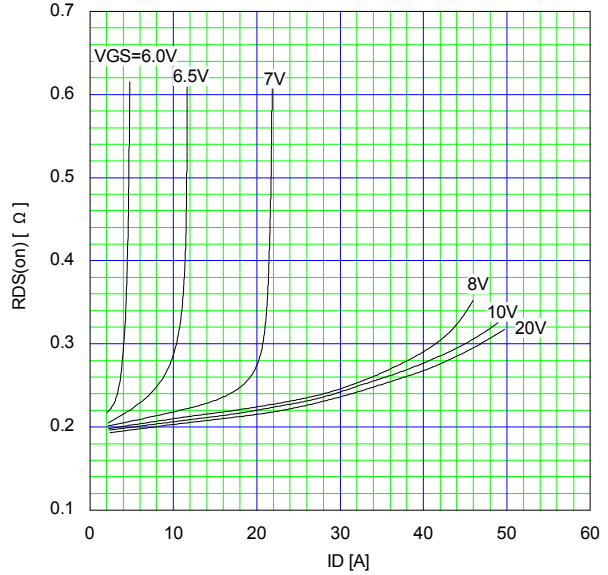
Typical Transfer Characteristic  
 $I_D = f(V_{GS}): 80\ \mu\text{s pulse test}, V_{DS}=25\text{V}, T_{ch}=25^\circ\text{C}$



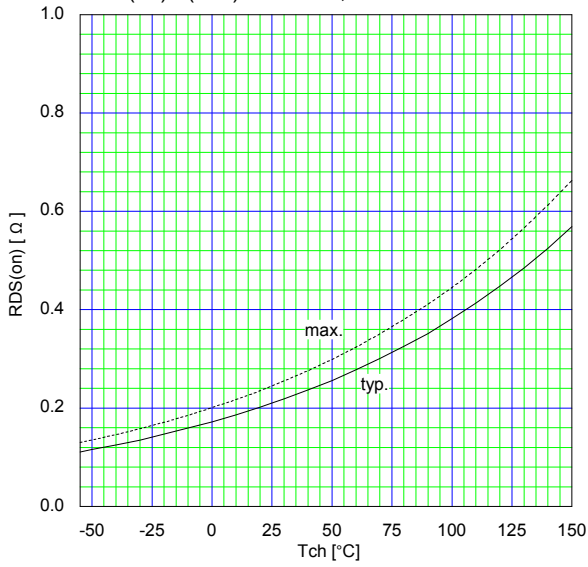
Typical Transconductance  
 $g_{fs} = f(I_D): 80\ \mu\text{s pulse test}, V_{DS}=25\text{V}, T_{ch}=25^\circ\text{C}$



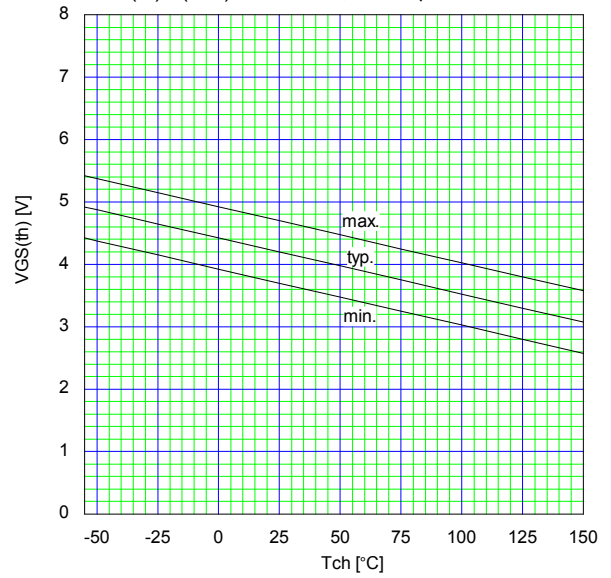
Typical Drain-Source on-state Resistance  
 $R_{DS(on)} = f(I_D): 80\ \mu\text{s pulse test}, T_{ch}=25^\circ\text{C}$



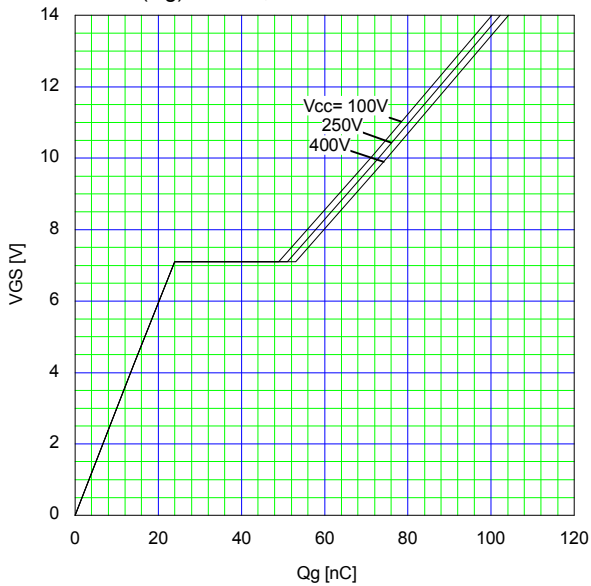
Drain-Source On-state Resistance  
 $R_{DS(on)} = f(T_{ch})$ ;  $I_D = 11.5A, V_{GS} = 10V$



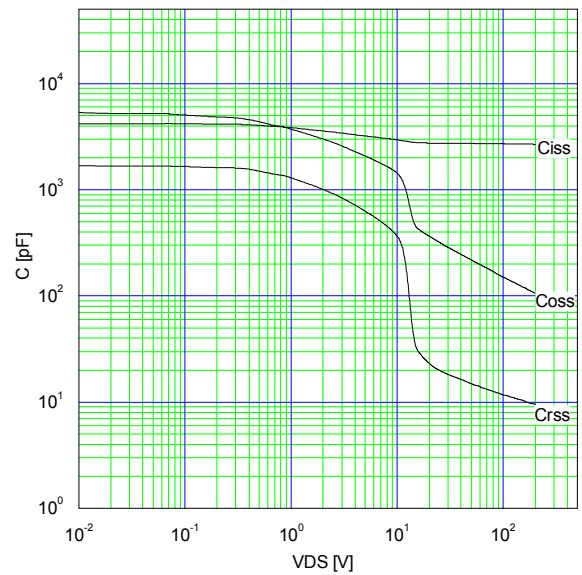
Gate Threshold Voltage vs. T<sub>ch</sub>  
 $V_{GS(th)} = f(T_{ch})$ ;  $V_{DS} = V_{GS}, I_D = 250\mu A$



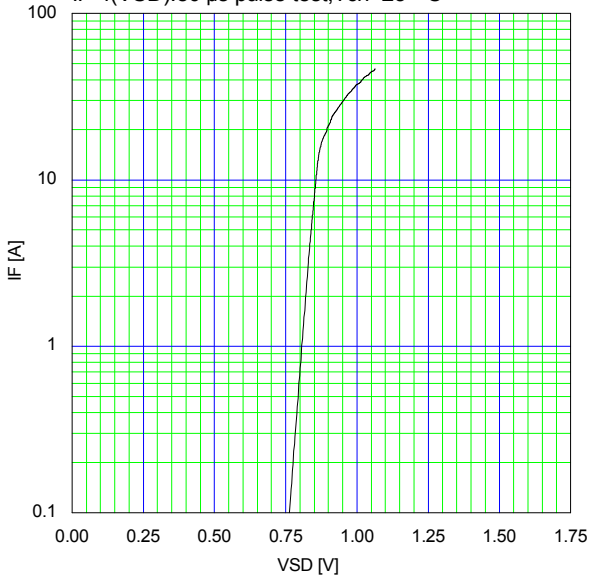
Typical Gate Charge Characteristics  
 $V_{GS} = f(Q_g)$ ;  $I_D = 23A, T_{ch} = 25^\circ C$



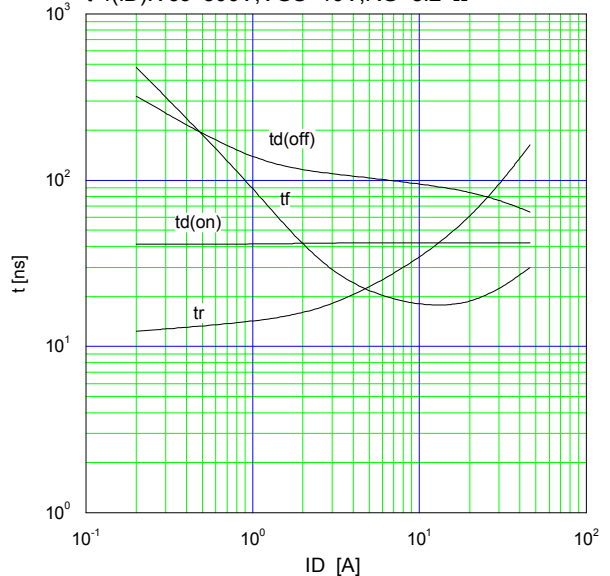
Typical Capacitance  
 $C = f(V_{DS})$ ;  $V_{GS} = 0V, f = 1MHz$



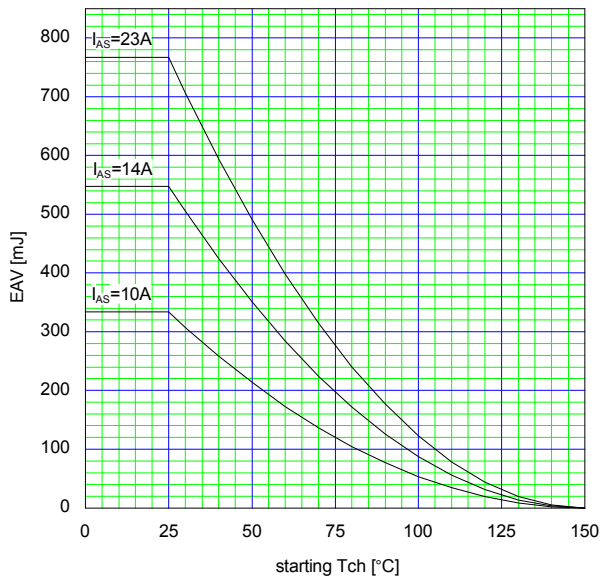
Typical Forward Characteristics of Reverse Diode  
 $I_F = f(V_{SD})$ ;  $80\mu s$  pulse test,  $T_{ch} = 25^\circ C$



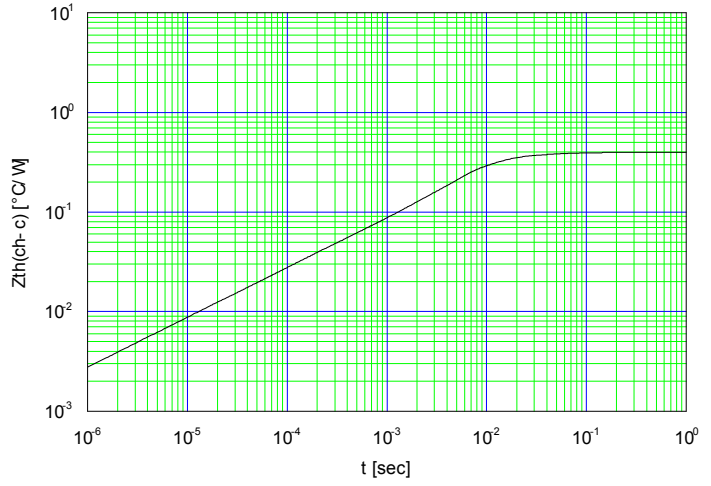
Typical Switching Characteristics vs. I<sub>D</sub>  
 $t = f(I_D)$ ;  $V_{cc} = 300V, V_{GS} = 10V, R_G = 8.2\Omega$



Maximum Avalanche Energy vs. starting Tch  
 $E(AV)=f(\text{starting Tch}):V_{CC}=50V, I(AV)\leq 23A$



Maximum Transient Thermal Impedance  
 $Z_{th(ch-c)}=f(t):D=0$



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  - Machine tools                      • Audiovisual equipment                      • Electrical home appliances                      • Personal equipment                      • Industrial robots etc.
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  - Medical equipment
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