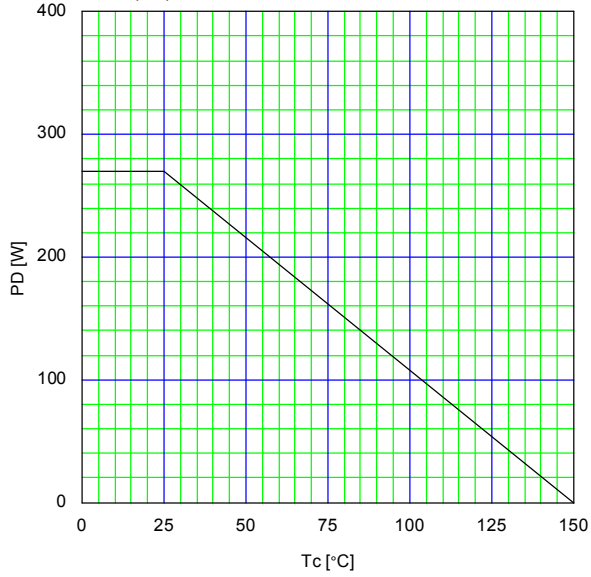
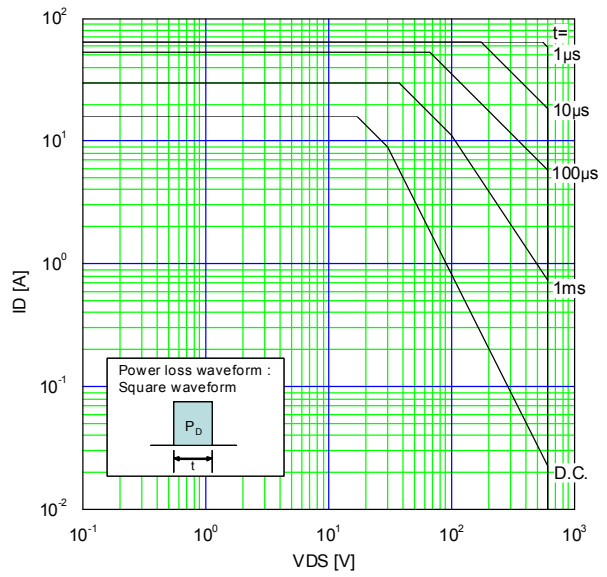




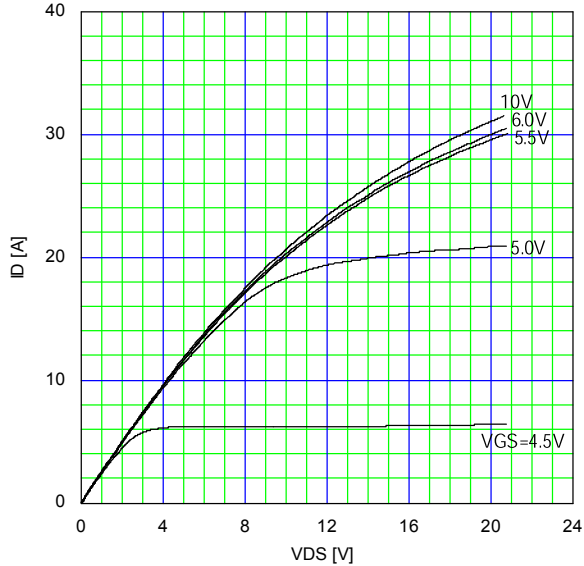
Allowable Power Dissipation  
 $PD=f(T_c)$



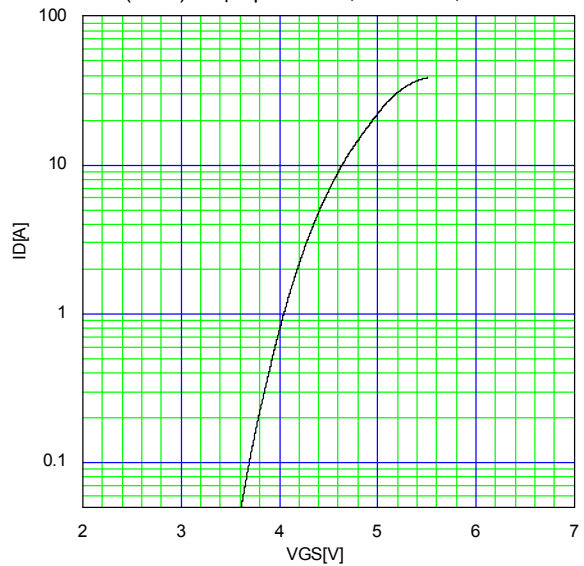
Safe Operating Area  
 $I_D=f(V_{DS}): \text{Duty}=0(\text{Single pulse}), T_c=25^\circ\text{C}$



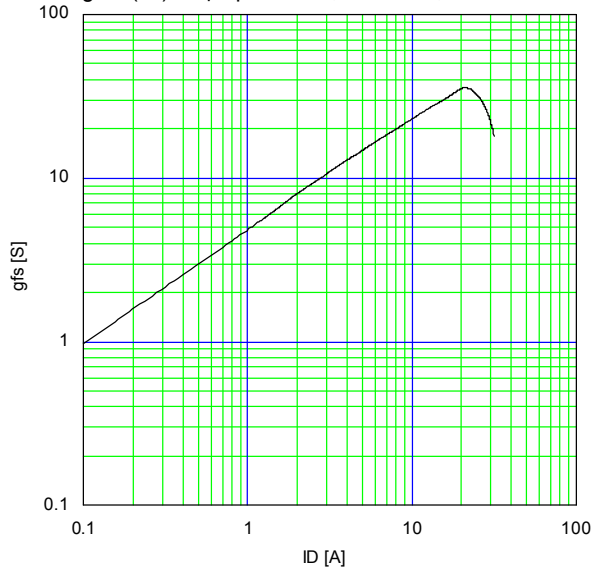
Typical Output Characteristics  
 $I_D=f(V_{DS}): 80 \mu\text{s pulse test}, T_{ch}=25^\circ\text{C}$



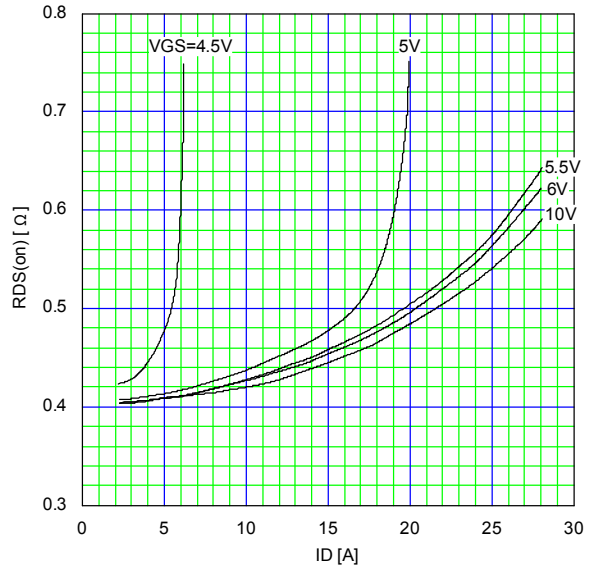
Typical Transfer Characteristic  
 $I_D=f(V_{GS}): 80 \mu\text{s pulse test}, V_{DS}=25\text{V}, T_{ch}=25^\circ\text{C}$



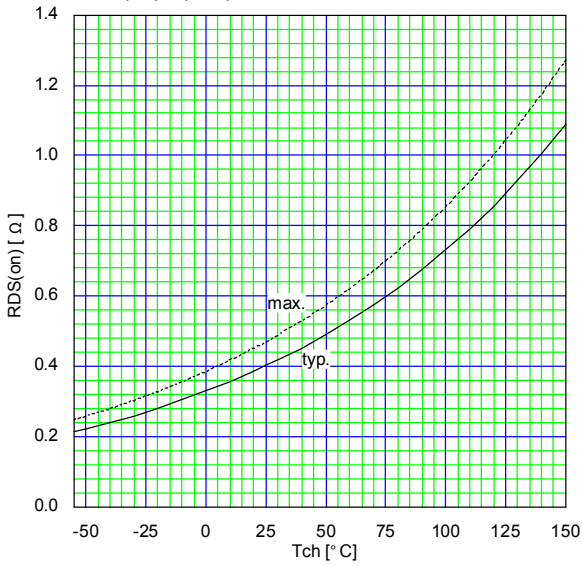
Typical Transconductance  
 $g_{fs}=f(I_D): 80 \mu\text{s pulse test}, V_{DS}=25\text{V}, T_{ch}=25^\circ\text{C}$



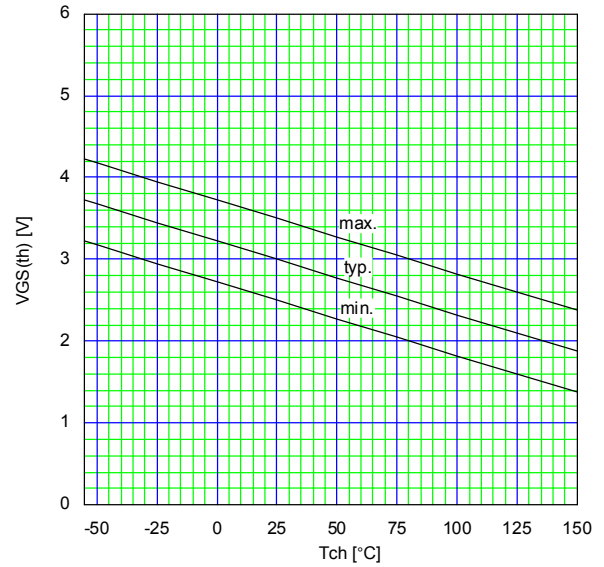
Typical Drain-Source on-state Resistance  
 $R_{DS(on)}=f(I_D): 80 \mu\text{s pulse test}, T_{ch}=25^\circ\text{C}$



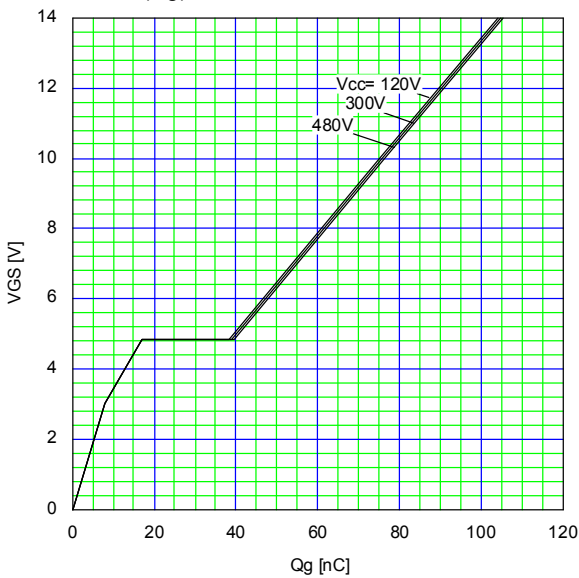
Drain-Source On-state Resistance  
 $R_{DS(on)}=f(T_{ch}):I_D=8A, V_{GS}=10V$



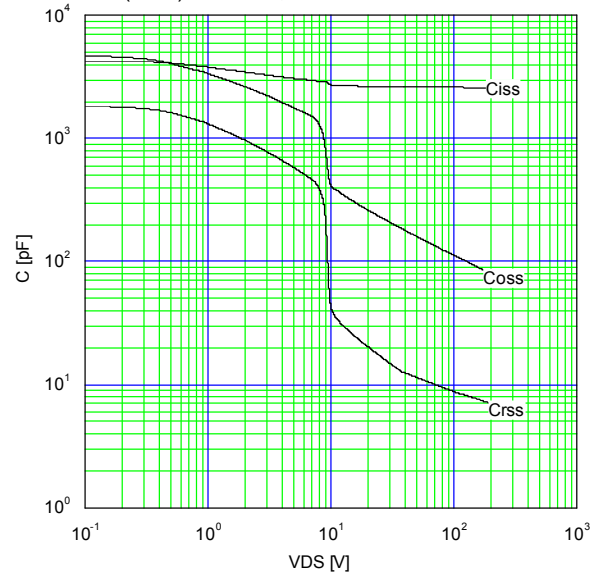
Gate Threshold Voltage vs. T<sub>ch</sub>  
 $V_{GS(th)}=f(T_{ch}):V_{DS}=V_{GS}, I_D=250\mu A$



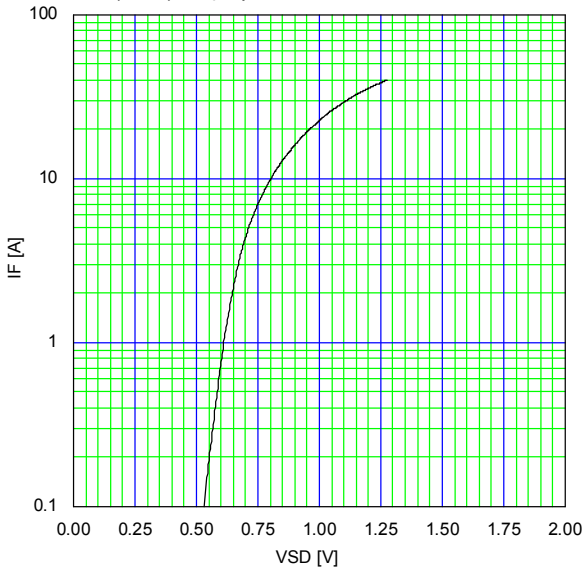
Typical Gate Charge Characteristics  
 $V_{GS}=f(Q_g):I_D=16A, T_{ch}=25^\circ C$



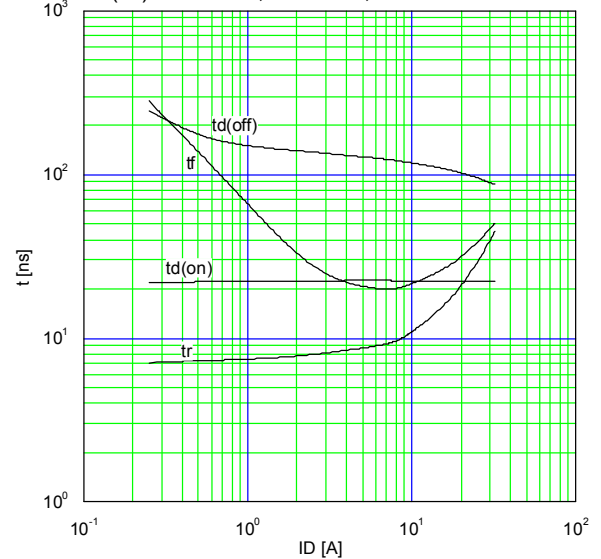
Typical Capacitance  
 $C=f(V_{DS}):V_{GS}=0V, f=1MHz$



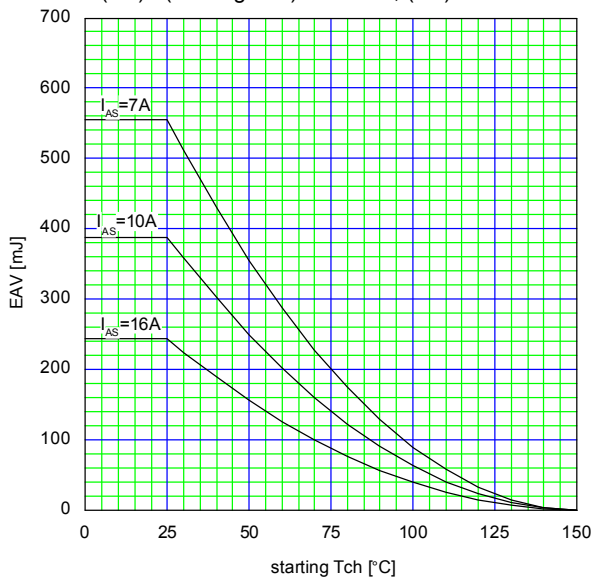
Typical Forward Characteristics of Reverse Diode  
 $I_F=f(V_{SD}):80\mu s\text{ pulse test}, T_{ch}=25^\circ C$



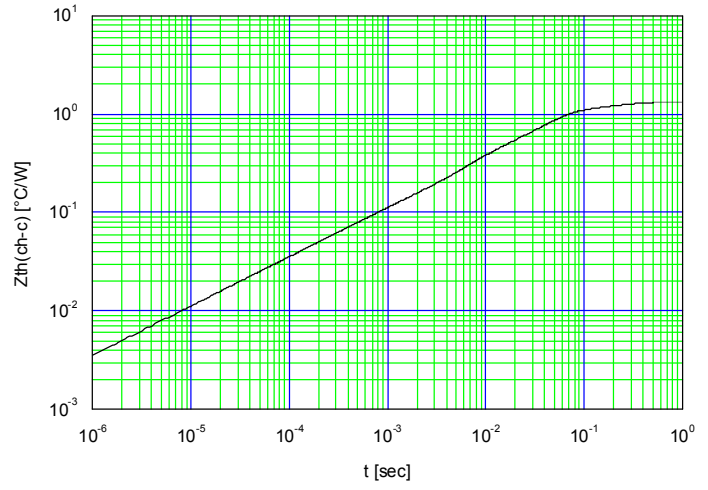
Typical Switching Characteristics vs. I<sub>D</sub>  
 $t=f(I_D):V_{cc}=300V, V_{GS}=10V, R_G=10\Omega$



Maximum Avalanche Energy vs. starting Tch  
 $E(AV)=f(\text{starting Tch}):V_{cc}=60V, I(AV)\leq 16A$



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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  - Emergency equipment for responding to disasters and anti-burglary devices                      • Safety devices
  - Medical equipment
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