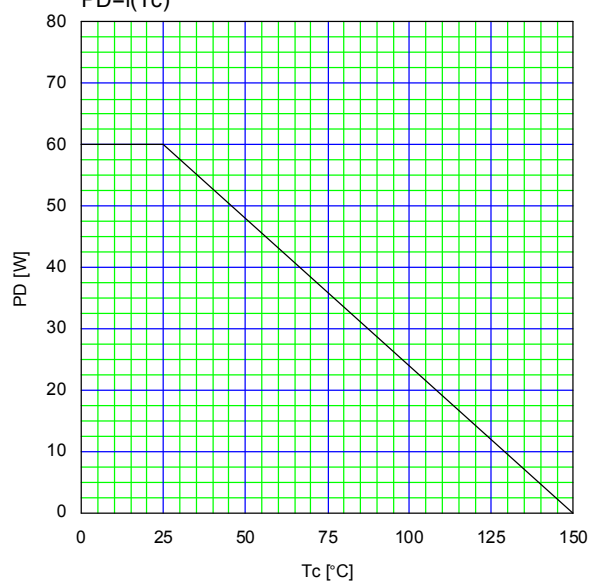
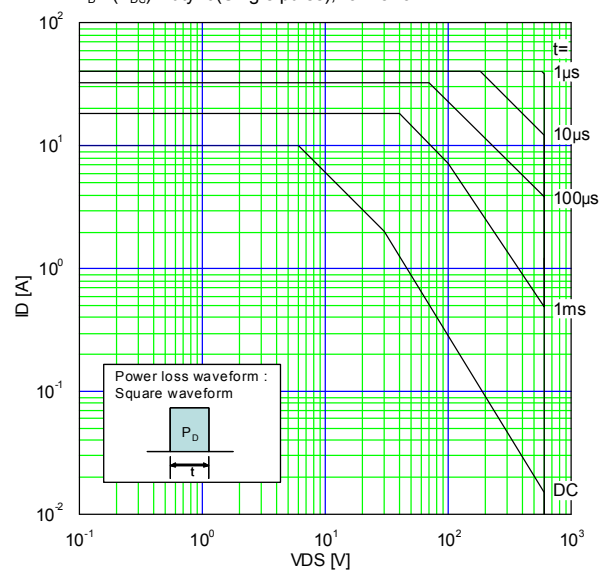




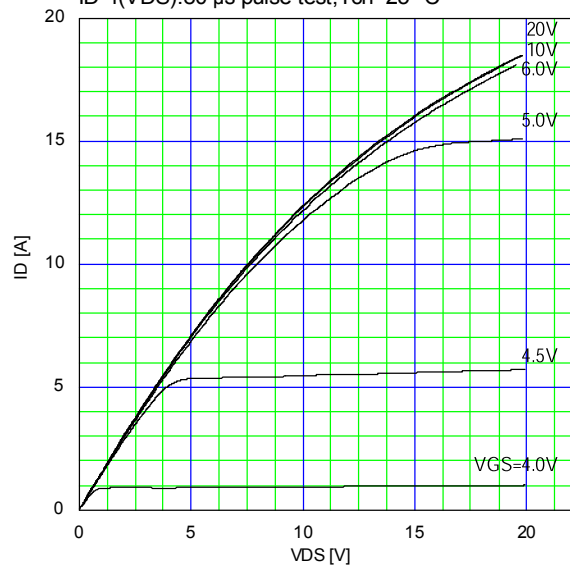
Allowable Power Dissipation  
 $PD=f(T_c)$



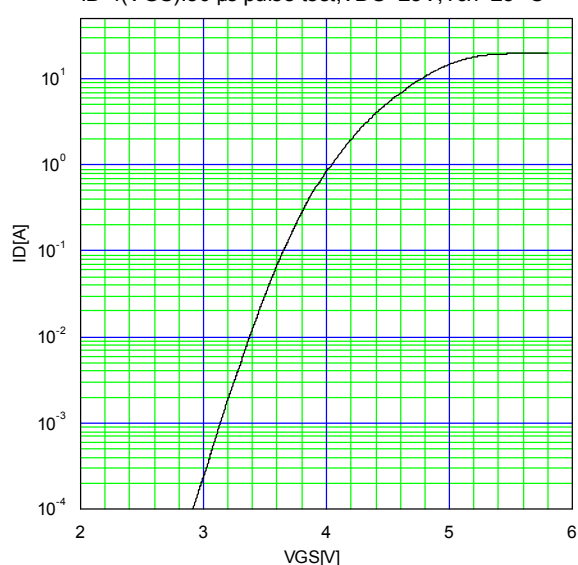
Safe Operating Area  
 $I_D=f(V_{DS}): \text{Duty}=0(\text{Single pulse}), T_c=25\text{ }^{\circ}\text{C}$



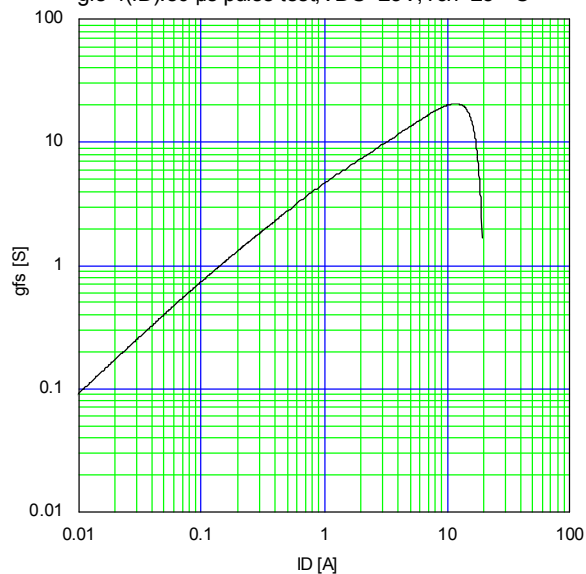
Typical Output Characteristics  
 $I_D=f(V_{DS}): 80\text{ }\mu\text{s pulse test}, T_{ch}=25\text{ }^{\circ}\text{C}$



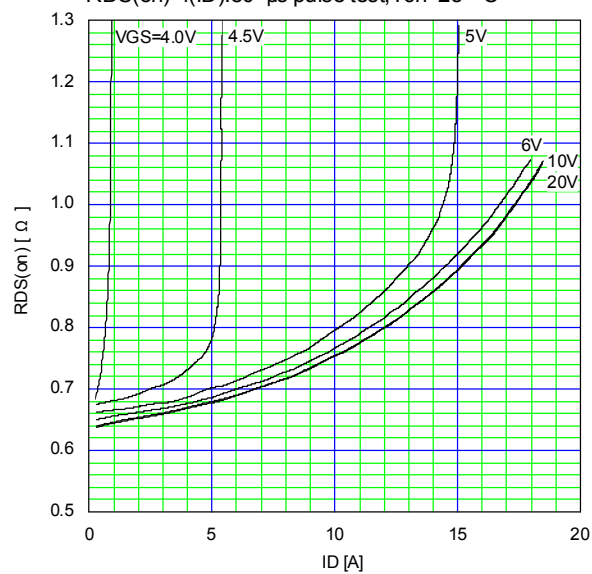
Typical Transfer Characteristic  
 $I_D=f(V_{GS}): 80\text{ }\mu\text{s pulse test}, V_{DS}=25\text{V}, T_{ch}=25\text{ }^{\circ}\text{C}$



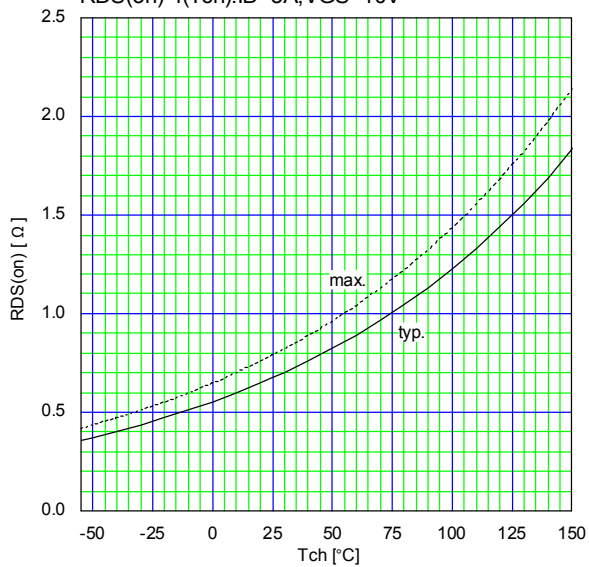
Typical Transconductance  
 $g_{fs}=f(I_D): 80\text{ }\mu\text{s pulse test}, V_{DS}=25\text{V}, T_{ch}=25\text{ }^{\circ}\text{C}$



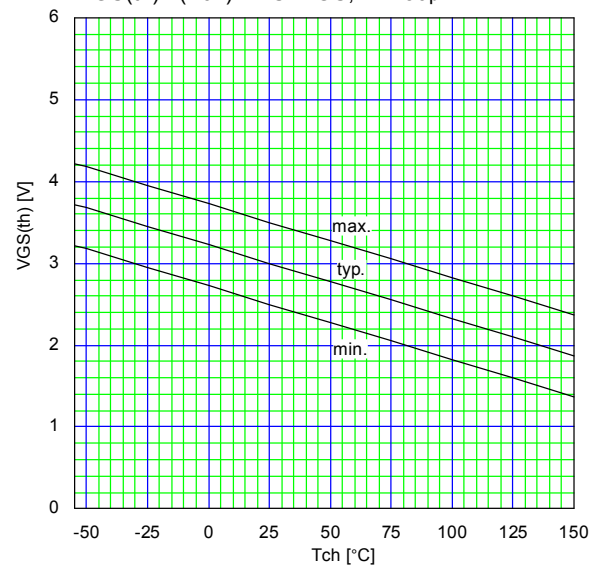
Typical Drain-Source on-state Resistance  
 $R_{DS(on)}=f(I_D): 80\text{ }\mu\text{s pulse test}, T_{ch}=25\text{ }^{\circ}\text{C}$



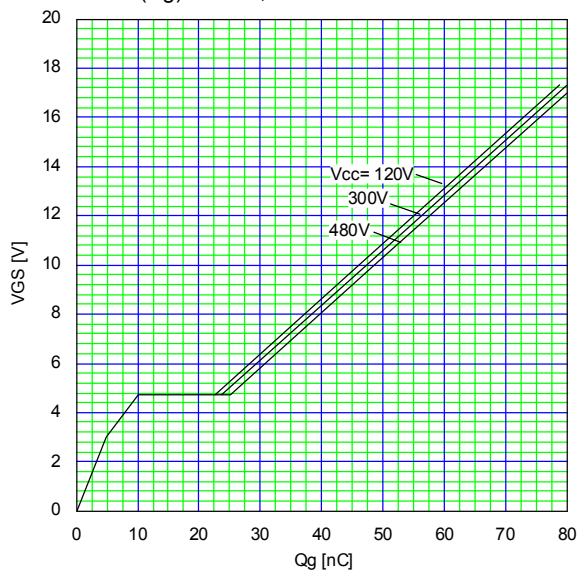
Drain-Source On-state Resistance  
 $R_{DS(on)} = f(T_{ch}): I_D = 5A, V_{GS} = 10V$



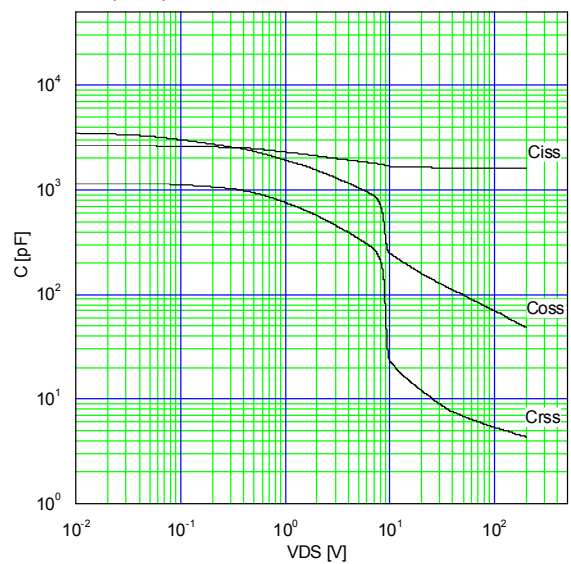
Gate Threshold Voltage vs.  $T_{ch}$   
 $V_{GS(th)} = f(T_{ch}): V_{DS} = V_{GS}, I_D = 250\mu A$



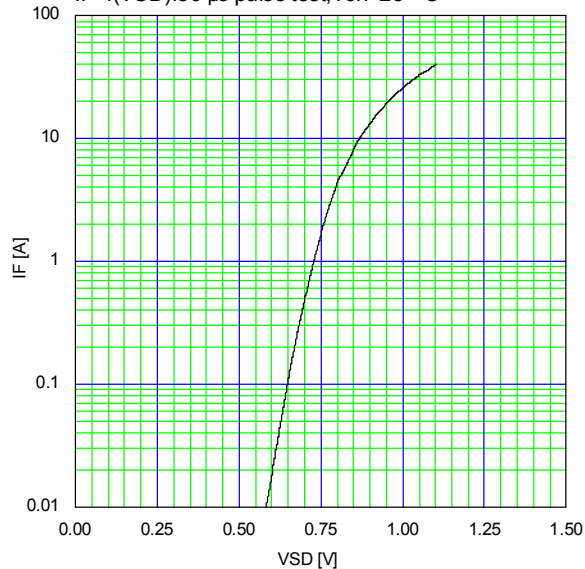
Typical Gate Charge Characteristics  
 $V_{GS} = f(Q_g): I_D = 10A, T_{ch} = 25^{\circ}C$



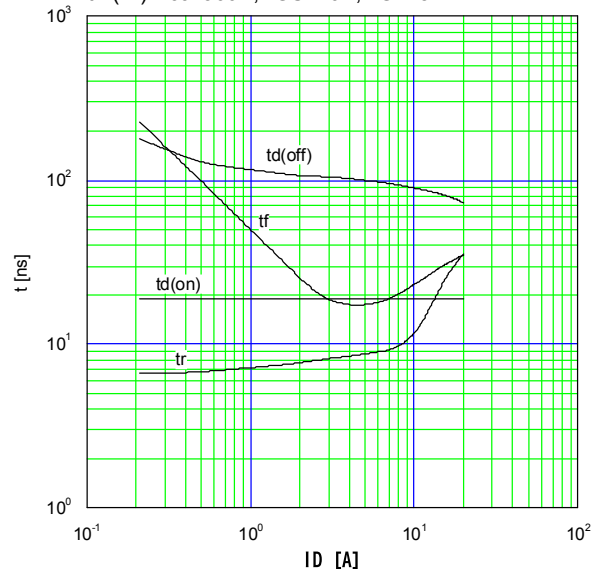
Typical Capacitance  
 $C = f(V_{DS}): V_{GS} = 0V, f = 1MHz$

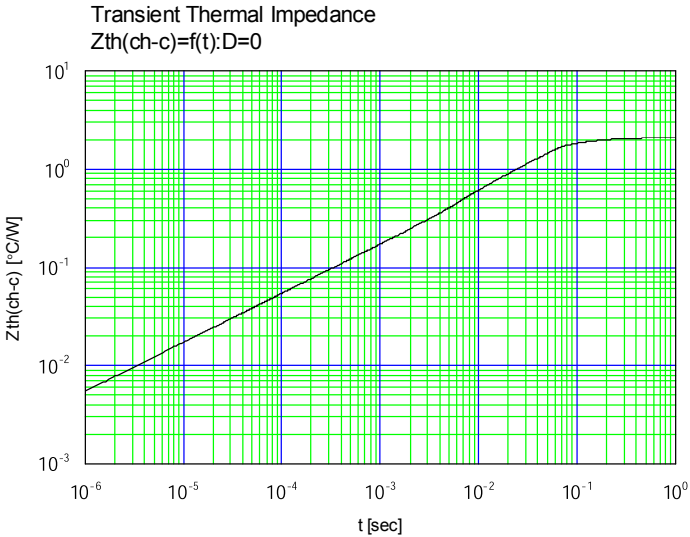
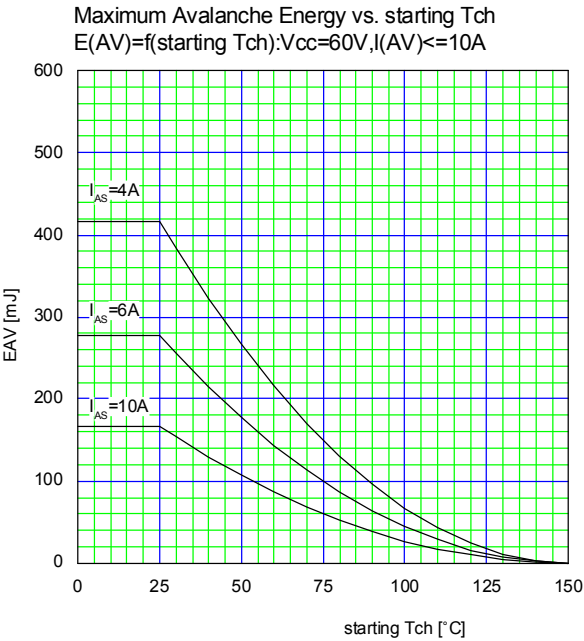


Typical Forward Characteristics of Reverse Diode  
 $I_F = f(V_{SD}): 80\mu s$  pulse test,  $T_{ch} = 25^{\circ}C$



Typical Switching Characteristics vs.  $I_D$   
 $t = f(I_D): V_{CC} = 300V, V_{GS} = 10V, R_G = 15\Omega$





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1. This Catalog contains the product specifications, characteristics, data, materials, and structures as of October 2008.  
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• Machine tools	• Audiovisual equipment	• Electrical home appliances	• Personal equipment
			• Industrial robots etc.
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• Traffic-signal control equipment	• Gas leakage detectors with an auto-shut-off feature
• Emergency equipment for responding to disasters and anti-burglary devices	• Safety devices
• Medical equipment	
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• Submarine repeater equipment		
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