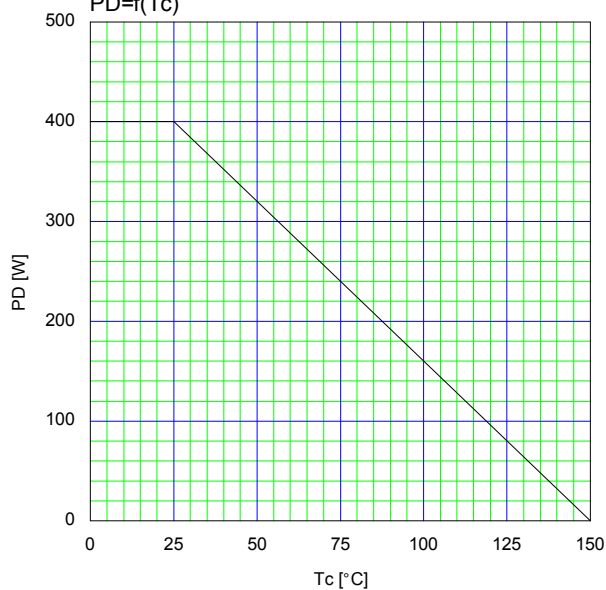
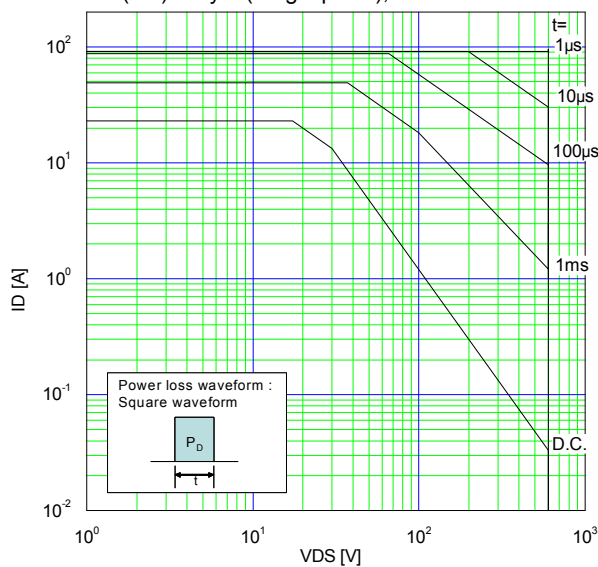




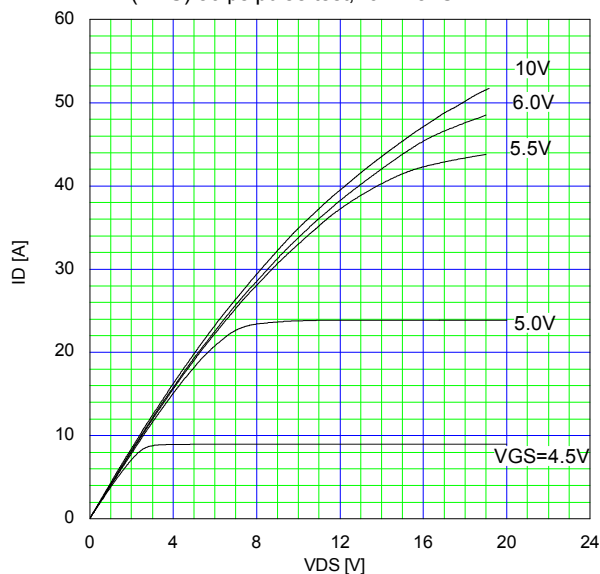
Allowable Power Dissipation  
 $P_D = f(T_c)$



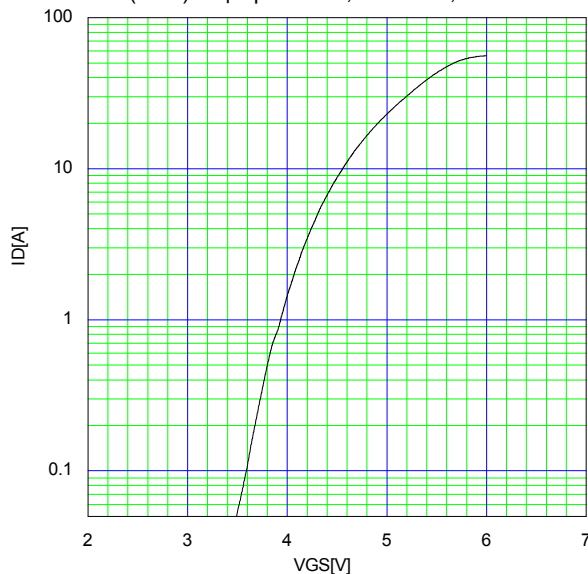
Safe Operating Area  
 $I_D = f(V_{DS})$ : Duty=0 (Single pulse),  $T_c = 25^\circ\text{C}$



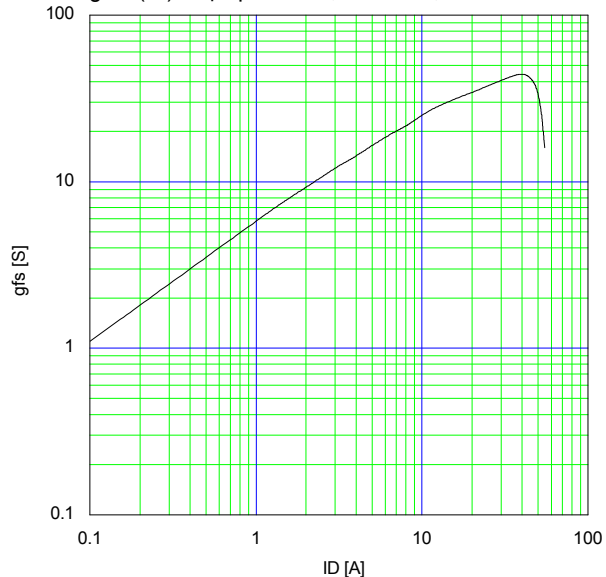
Typical Output Characteristics  
 $I_D = f(V_{DS})$ : 80 μs pulse test,  $T_{ch} = 25^\circ\text{C}$



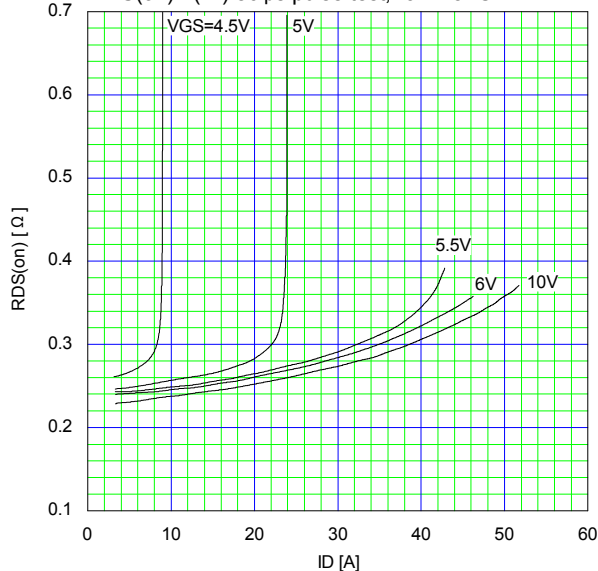
Typical Transfer Characteristic  
 $I_D = f(V_{GS})$ : 80 μs pulse test,  $V_{DS} = 25\text{V}$ ,  $T_{ch} = 25^\circ\text{C}$



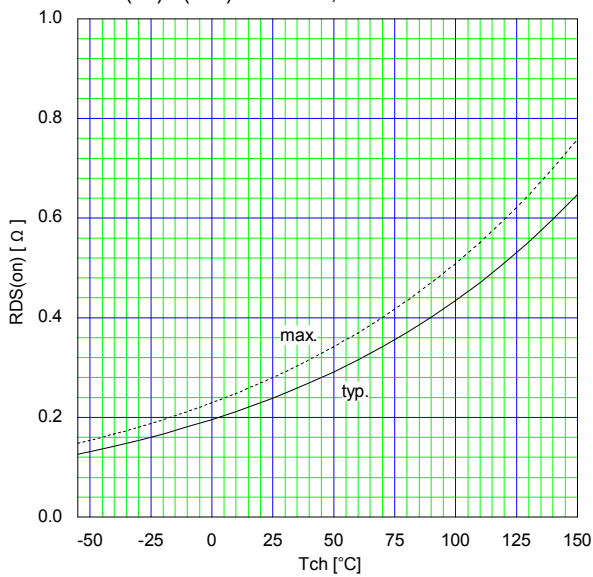
Typical Transconductance  
 $g_{fs} = f(I_D)$ : 80 μs pulse test,  $V_{DS} = 25\text{V}$ ,  $T_{ch} = 25^\circ\text{C}$



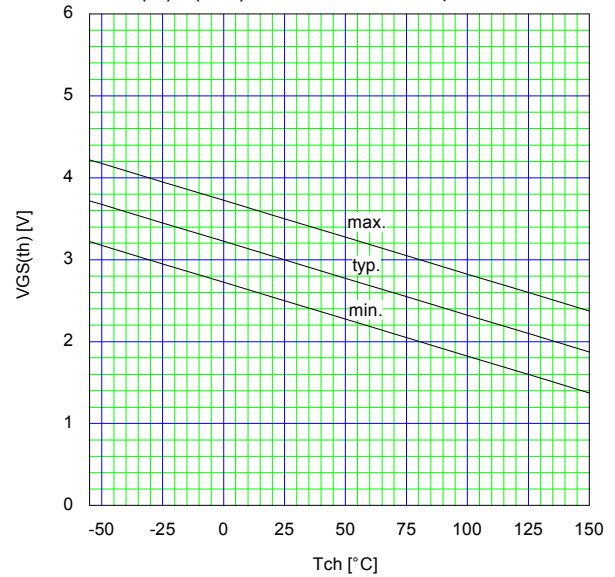
Typical Drain-Source on-state Resistance  
 $R_{DS(on)} = f(I_D)$ : 80 μs pulse test,  $T_{ch} = 25^\circ\text{C}$



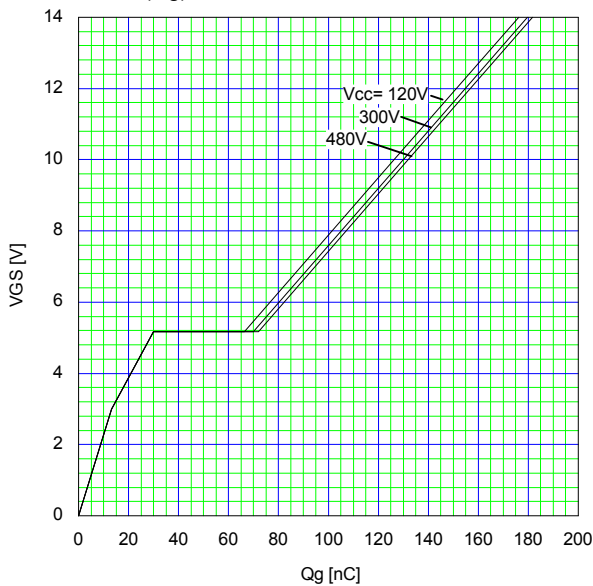
Drain-Source On-state Resistance  
 $R_{DS(on)} = f(T_{ch})$ :  $I_D = 11.5A$ ,  $V_{GS} = 10V$



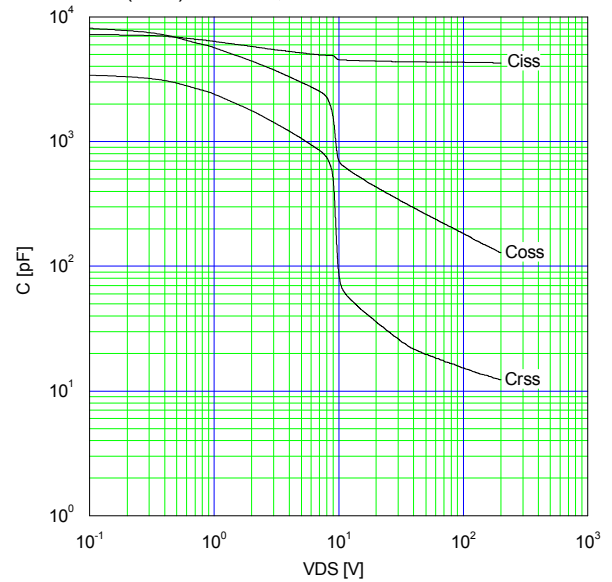
Gate Threshold Voltage vs.  $T_{ch}$   
 $V_{GS(th)} = f(T_{ch})$ :  $V_{DS} = V_{GS}$ ,  $I_D = 250\mu A$



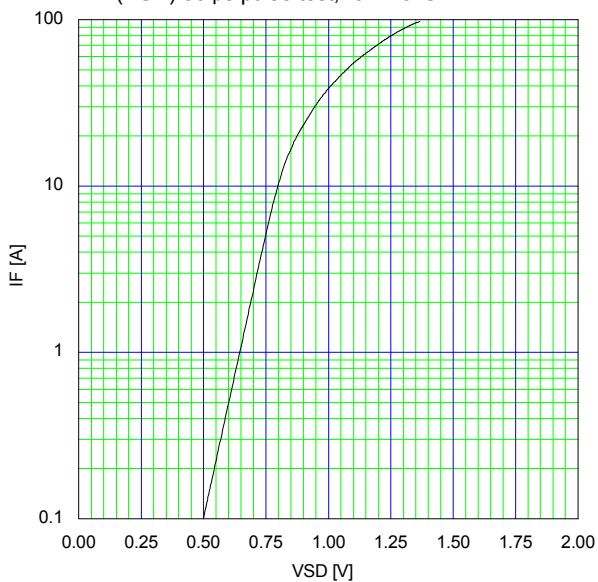
Typical Gate Charge Characteristics  
 $V_{GS} = f(Q_g)$ :  $I_D = 23A$ ,  $T_{ch} = 25^{\circ}C$



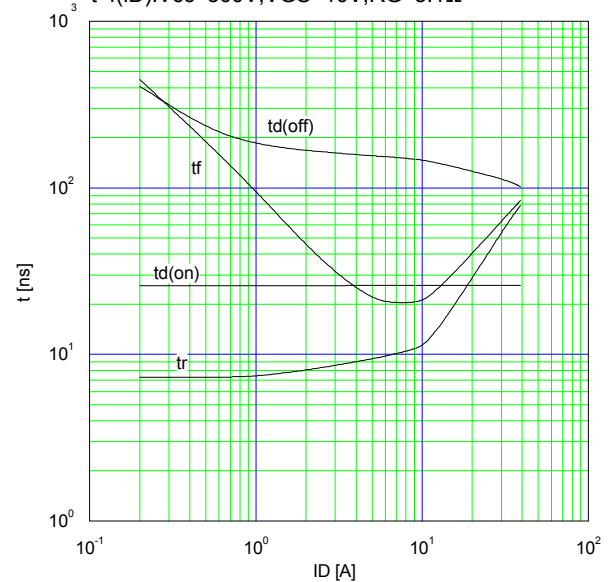
Typical Capacitance  
 $C = f(V_{DS})$ :  $V_{GS} = 0V$ ,  $f = 1MHz$

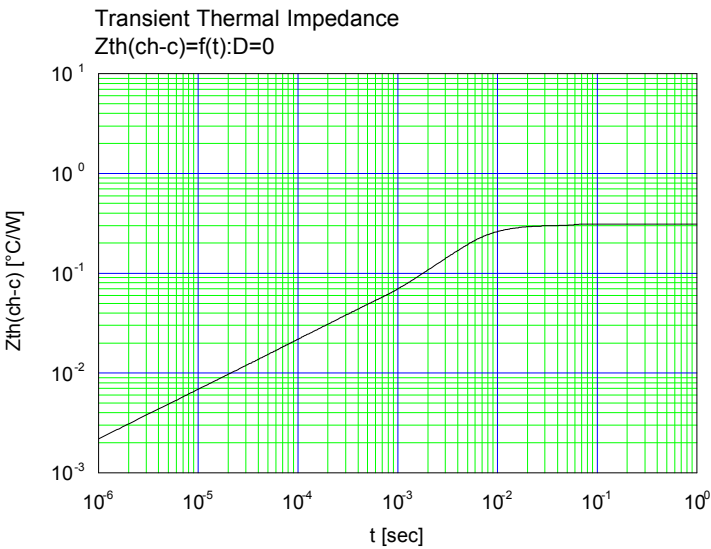
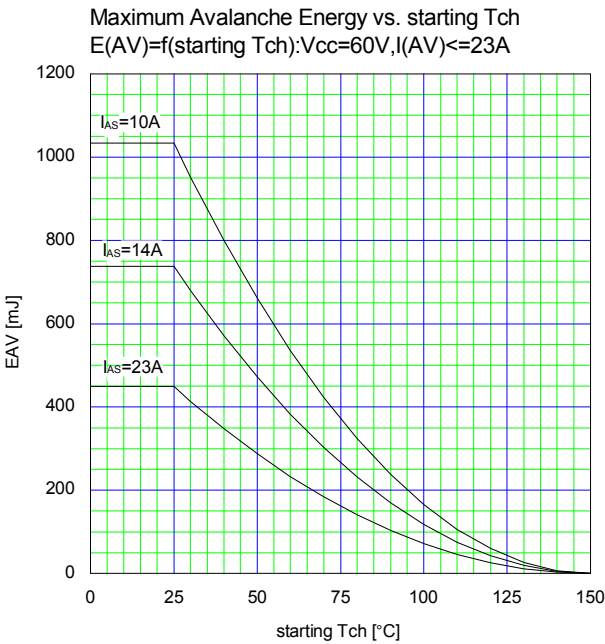


Typical Forward Characteristics of Reverse Diode  
 $I_F = f(V_{SD})$ : 80  $\mu s$  pulse test,  $T_{ch} = 25^{\circ}C$



Typical Switching Characteristics vs.  $I_D$   
 $t = f(I_D)$ :  $V_{CC} = 300V$ ,  $V_{GS} = 10V$ ,  $R_G = 5.1\Omega$





## WARNING

1. This Catalog contains the product specifications, characteristics, data, materials, and structures as of October 2008.  
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4. The products introduced in this Catalog are intended for use in the following electronic and electrical equipment which has normal reliability requirements.
 

|                 |                         |                                               |                          |
|-----------------|-------------------------|-----------------------------------------------|--------------------------|
| • Computers     | • OA equipment          | • Communications equipment (terminal devices) | • Measurement equipment  |
| • Machine tools | • Audiovisual equipment | • Electrical home appliances                  | • Personal equipment     |
|                 |                         |                                               | • Industrial robots etc. |
5. If you need to use a product in this Catalog for equipment requiring higher reliability than normal, such as for the equipment listed below, it is imperative to contact Fuji Electric Device Technology Co., Ltd. to obtain prior approval. When using these products for such equipment, take adequate measures such as a backup system to prevent the equipment from malfunctioning even if a Fuji's product incorporated in the equipment becomes faulty.
 

|                                                                             |                                                       |
|-----------------------------------------------------------------------------|-------------------------------------------------------|
| • Transportation equipment (mounted on cars and ships)                      | • Trunk communications equipment                      |
| • 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                                                         |                                                       |
6. Do not use products in this Catalog for the equipment requiring strict reliability such as the following and equivalents to strategic equipment (without limitation).
 

|                                |                        |                             |
|--------------------------------|------------------------|-----------------------------|
| • Space equipment              | • Aeronautic equipment | • Nuclear control equipment |
| • Submarine repeater equipment |                        |                             |
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