



N-channel MOS-FET			
900V	5,5Ω	3,5A	100W

# 2SK2770-01

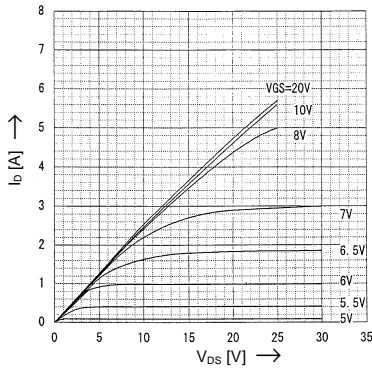
## FAP-IIS Series



### > Characteristics

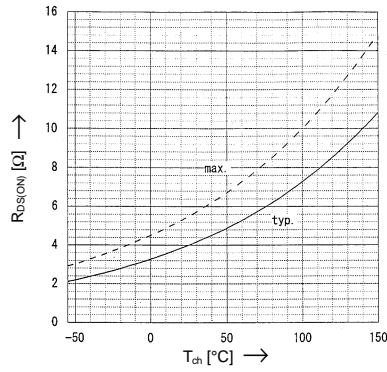
Typical Output Characteristics

$I_D=f(V_{DS})$ ; 80μs pulse test;  $T_C=25^\circ\text{C}$



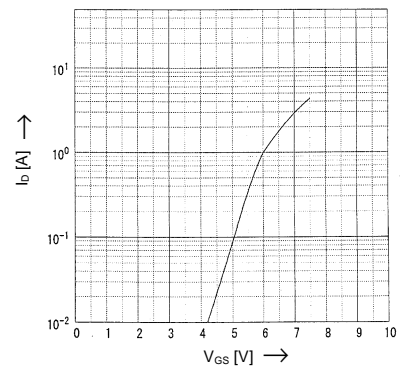
Drain-Source On-State Resistance vs.  $T_{ch}$

$R_{DS(on)}=f(T_{ch})$ ;  $I_D=2\text{A}$ ;  $V_{GS}=10\text{V}$



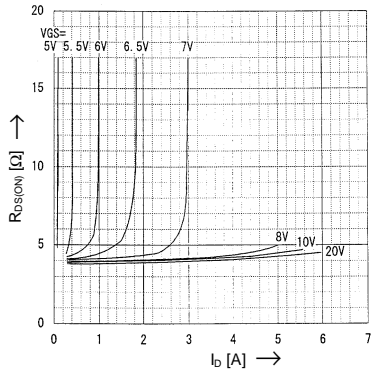
Typical Transfer Characteristics

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



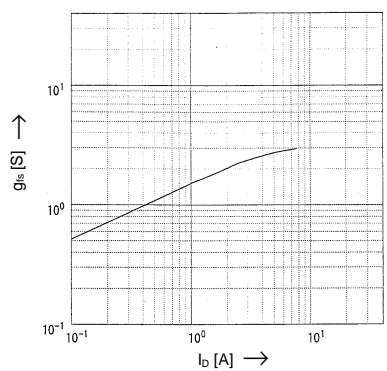
Typical Drain-Source On-State-Resistance vs.  $I_D$

$R_{DS(on)}=f(I_D)$ ; 80μs pulse test;  $T_C=25^\circ\text{C}$



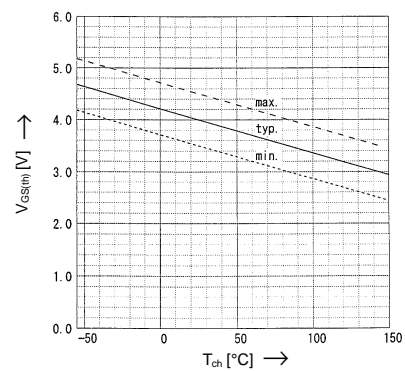
Typical Forward Transconductance vs.  $I_D$

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



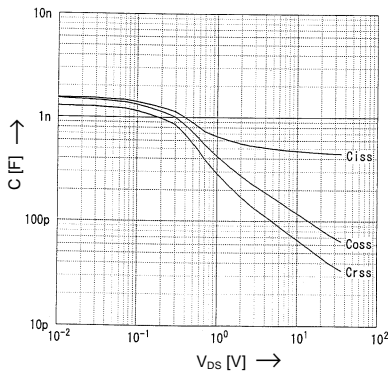
Gate Threshold Voltage vs.  $T_{ch}$

$V_{GS(th)}=f(T_{ch})$ ;  $I_D=1\text{mA}$ ;  $V_{DS}=V_{GS}$



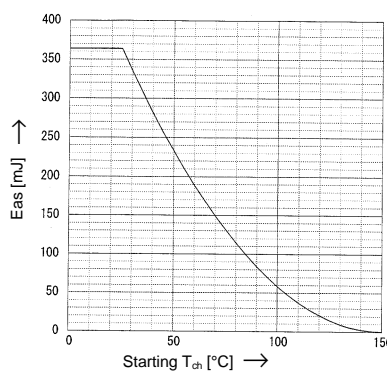
Typical Capacitances vs.  $V_{DS}$

$C=f(V_{DS})$ ;  $V_{GS}=0\text{V}$ ;  $f=1\text{MHz}$



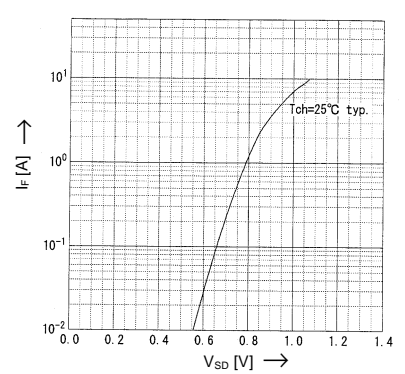
Avalanche Energy Derating

$E_{as}=f(\text{starting } T_{ch})$ ;  $V_{CC}=90\text{V}$ ;  $I_{AV}=3,5\text{A}$



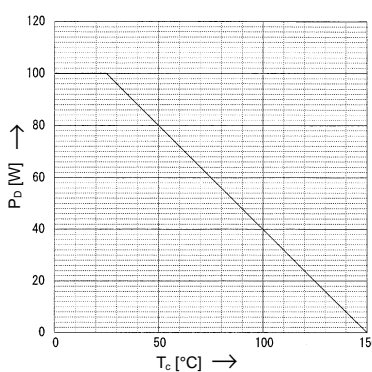
Forward Characteristics of Reverse Diode

$I_F=f(V_{SD})$ ; 80μs pulse test;  $V_{GS}=0\text{V}$



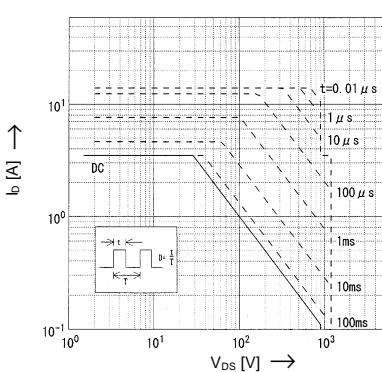
Allowable Power Dissipation vs.  $T_C$

$P_D=f(T_C)$



Safe Operation Area

$I_D=f(V_{DS})$ ;  $D=0,01$ ;  $T_C=25^\circ\text{C}$



Transient Thermal impedance

$Z_{th(ch-e)}=f(t)$  parameter:  $D=t/T$

