

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

2SK2770-01

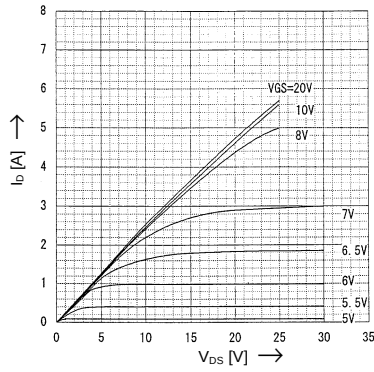
FAP-IIS Series

FUJI
ELECTRIC

> Characteristics

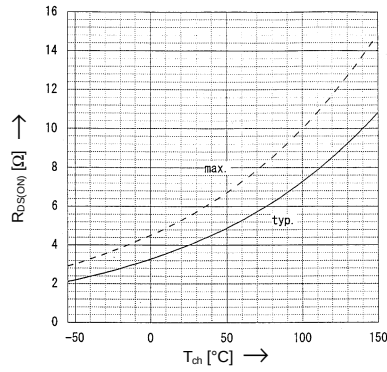
Typical Output Characteristics

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



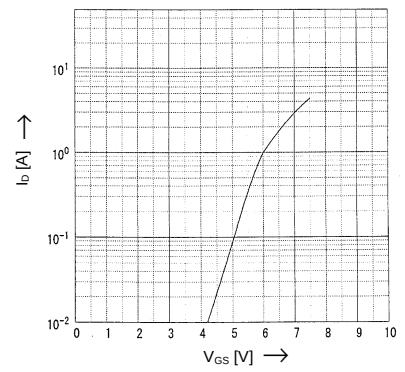
Drain-Source On-State Resistance vs. T_{ch}

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



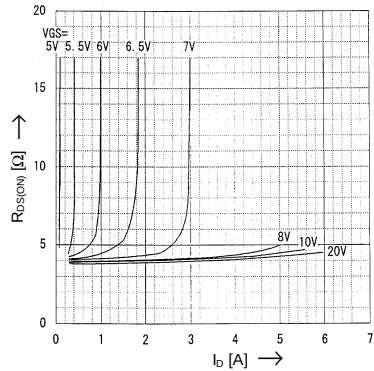
Typical Transfer Characteristics

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



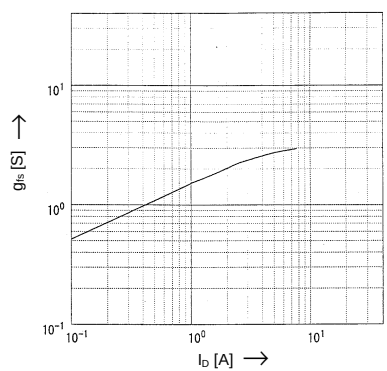
Typical Drain-Source On-State-Resistance vs. I_D

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



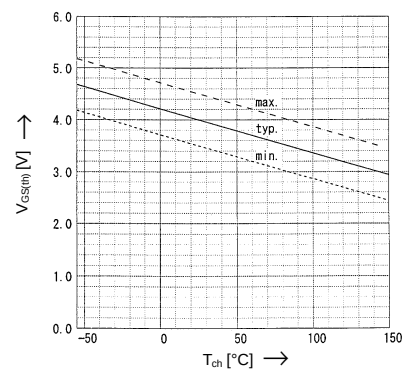
Typical Forward Transconductance vs. I_D

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



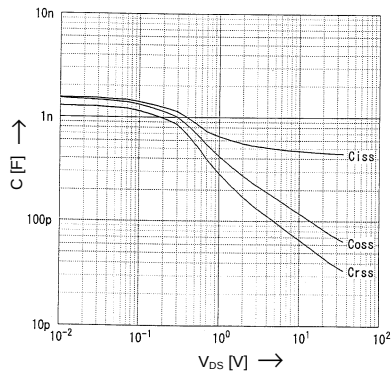
Gate Threshold Voltage vs. T_{ch}

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



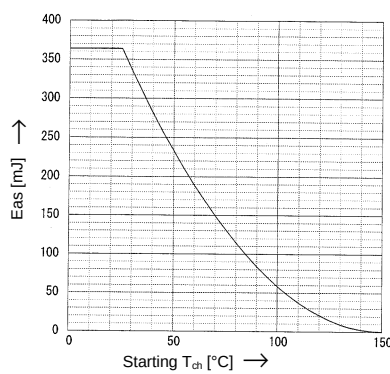
Typical Capacitances vs. V_{DS}

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



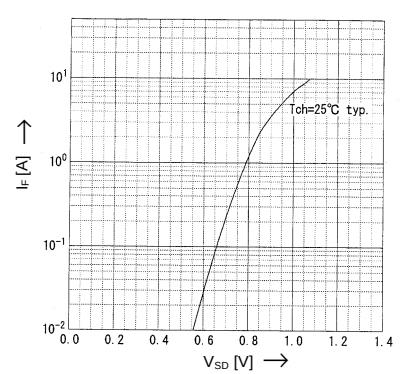
Avalanche Energy Derating

$E_{as} = f(\text{starting } T_{ch})$; $V_{CC} = 90V$; $I_{AV} = 3.5A$



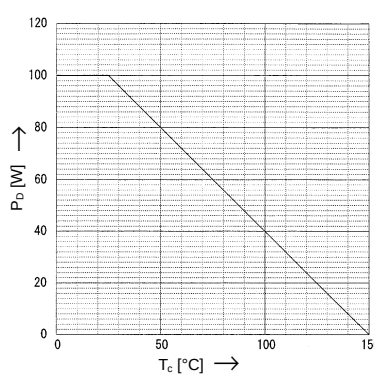
Forward Characteristics of Reverse Diode

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



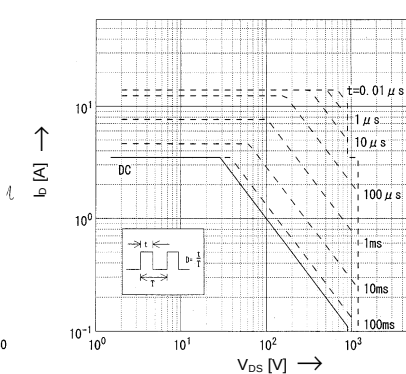
Allowable Power Dissipation vs. T_C

$P_D = f(T_C)$



Safe Operation Area

$I_D = f(V_{DS})$; $D = 0.01$; $T_C = 25^\circ\text{C}$



$Z_{th(ch-c)}$ [K/W]

Transient Thermal impedance

$Z_{thch} = f(t)$ parameter: $D = t/T$

