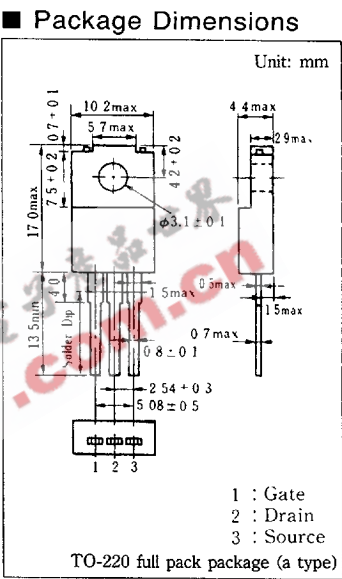


2SK1266

Silicon N-channel Power F-MOS FET

- Features
- Low ON resistance $R_{DS(on)}$: $R_{DS(on)1}=0.08\Omega$ (typ.)
 - High switching rate : $t_f=180ns$ (typ.)
 - No secondary breakdown
 - For low voltage driving ($V_{GS}=4V$)

- Application
- DC-DC converter
 - No contact relay
 - Solenoid drive
 - Motor drive



■ Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Value	Unit
Drain-source voltage	V_{DSS}	150	V
Gate-source voltage	V_{GSS}	±20	V
Drain current	DC I_D	20	A
	Peak-to-peak value I_{DP}	40	
Power dissipation	Tc=25°C P_D	45	W
	Ta=25°C	2.0	
Channel temperature	T_{ch}	150	°C
Storage temperature	T_{stg}	−55~+150	°C

■ Electrical Characteristics (Tc=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Drain current	I_{DSS}	$V_{DS}=130V, V_{GS}=0$			10	μA
Gate-source current	I_{GSS}	$V_{GS}=±20V, V_{DS}=0$			±1	μA
Drain-source voltage	V_{DSS}	$I_D=1mA, V_{GS}=0$	150			V
Gate threshold voltage	V_{th}	$V_{DS}=10V, I_D=1mA$	1		2.5	V
Drain-source ON resistance	$R_{DS(on)1}$	$V_{GS}=10V, I_D=10A$		0.08	0.12	Ω
Drain-source ON resistance	$R_{DS(on)2}$	$V_{GS}=4V, I_D=10A$		0.09	0.135	Ω
Forward transfer admittance	Yfs	$V_{DS}=10V, I_D=10A$	10	20		S
Input capacitance	C_{iss}	$V_{DS}=10V, V_{GS}=0, f=1MHz$		3450		pF
Output capacitance	C_{oss}			600		pF
Reverse transfer capacitance	C_{rss}			150		pF
Turn-on time	t_{on}	$V_{GS}=10V, I_D=10A$ $V_{DD}≈100V, R_L=10Ω$		90		ns
Fall time	t_f			180		ns
Delay time	$t_d(off)$			770		ns

