

2SK763, 2SK763A

Silicon N-channel Power F-MOS FET

■ Features

- Low ON resistance R_{DS} (on) : R_{DS} (on) = 0.9Ω (typ.)
- High switching rate : t_f = 50ns (typ.)
- No secondary breakdown
- High breakdown voltage

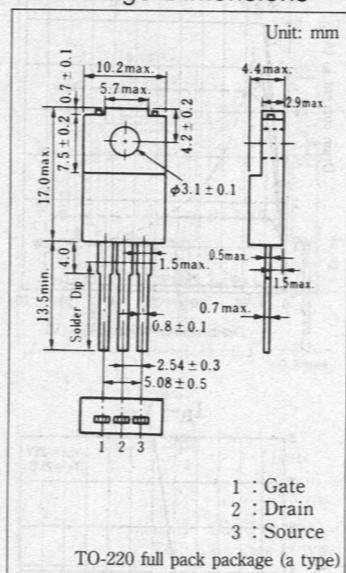
■ Application

- No contact relay
- Solenoid drive
- Motor drive
- Control equipment
- Switching power source

■ Absolute Maximum Ratings ($T_c=25^\circ\text{C}$)

Item	Symbol	Value	Unit
Drain-source voltage	V_{DSS}	400	V
2SK763A	2SK763A	450	
Gate-source voltage	V_{GSS}	± 20	V
Drain current	DC I_D	5	A
Peak-to-peak value	I_{DP}	10	
Power dissipation	$T_c=25^\circ\text{C}$ P_D	50	W
$T_a=25^\circ\text{C}$		2.0	
Channel temperature	T_{ch}	150	°C
Storage temperature	T_{stg}	-55~+150	°C

■ Package Dimensions



■ Electrical Characteristics ($T_c=25^\circ\text{C}$)

Item	Symbol	Condition	min.	typ.	max.	Unit
Drain current	I_{DSS}	$V_{DS}=320\text{V}$, $V_{GS}=0$			0.1	mA
Gate-source current	I_{GSS}	$V_{GS}=\pm 20\text{V}$, $V_{DS}=0$			± 1	μA
Drain-source voltage	V_{DSS}	$I_D = 1\text{ mA}$, $V_{GS}=0$	400			V
2SK763A	2SK763A		450			
Gate threshold voltage	V_{th}	$V_{DS}=25\text{V}$, $I_D=1\text{mA}$	1		5	V
Drain-source ON resistance	$R_{DS(\text{on})}$	$V_{GS}=10\text{V}$, $I_D=3\text{A}$		0.9	1.4	Ω
Forward transfer admittance	$ Y_{fs} $	$V_{DS}=25\text{V}$, $I_D=3\text{A}$	1.8	3.0		S
Input capacitance	C_{iss}			600		pF
Output capacitance	C_{oss}	$V_{DS}=20\text{V}$, $V_{GS}=0$, $f=1\text{MHz}$		140		pF
Reverse transfer capacitance	C_{rss}			60		pF
Turn-on time	t_{on}	$V_{GS}=10\text{V}$, $I_D=3\text{A}$ $V_{DD}=150\text{V}$, $R_L=50\Omega$		40		ns
Fall time	t_f			50		ns
Delay time	$t_d(\text{off})$			120		ns