

2SK760

Silicon N-channel Power F-MOS FET

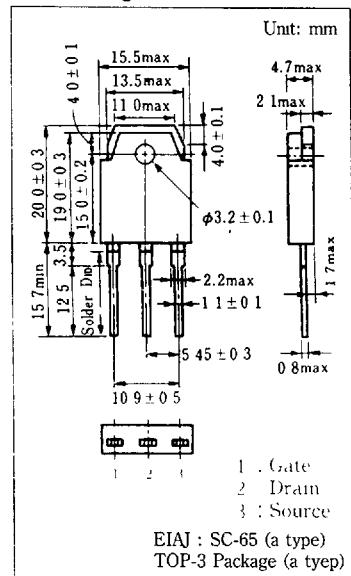
■ Features

- Low ON resistance R_{DS} (on) : R_{DS} (on) = 0.22Ω (typ.)
 - High switching rate : t_f = 120ns (typ.)
 - No secondary breakdown
 - Large power

■ Application

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

■ Package Dimensions



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

Item	Symbol	Value	Unit
Drain-source voltage	V _{DSS}	250	V
Gate-source voltage	V _{GSS}	±20	V
Drain current	DC	I _D	15
	Peak-to-peak value	I _{DP}	30
Power dissipation	T _C =25°C	P _D	100
	T _A =25°C		2.5
Channel temperature	T _{ch}	150	°C
Storage temperature	T _{stg}	-55~+150	°C

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

Item	Symbol	Condition	min.	typ.	max.	Unit
Drain current	I_{DSS}	$V_{DS}=200V, V_{GS}=0$			0.1	mA
Gate-source current	I_{GSS}	$V_{GS} = \pm 20V, V_{DS} = 0$			± 1	μA
Drain-source voltage	V_{DS}	$I_D = 1\text{ mA}, V_{GS} = 0$	250			V
Gate threshold voltage	V_{th}	$V_{DS} = 10V, I_D = 1\text{ mA}$	1		5	V
Drain-source ON resistance	$R_{DS(on)}$	$V_{GS} = 10V, I_D = 8A$		0.15	0.22	Ω
Forward transfer admittance	$ Y_{fs} $	$V_{GS} = 10V, I_D = 8A$	5.5	9.0		S
Input capacitance	C_{iss}	$V_{DS} = 10V, V_{GS} = 0, f = 1\text{ MHz}$		1410		pF
Output capacitance	C_{oss}			495		pF
Reverse transfer capacitance	C_{rss}			255		pF
Turn-on time	t_{on}	$V_{GS} = 10V, I_D = 8A$		100		ns
Fall time	t_f			120		ns
Delay time	$t_d(\text{off})$			320		ns

