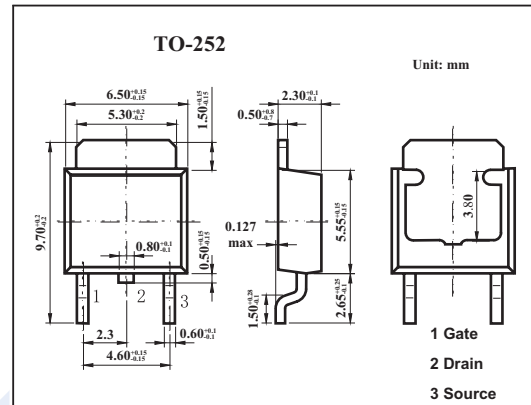
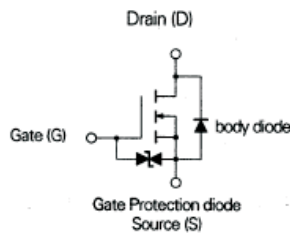


MOS Field Effect Power Transistor

2SK1284

■ Features

- Low on-state resistance
 $R_{DS(on)} \leq 0.32 \Omega$ @ $V_{GS}=10V, I_D=2A$
 $R_{DS(on)} \leq 0.40 \Omega$ @ $V_{GS}=4V, I_D=2A$
- Low C_{iss} $C_{iss}=500pF$ TYP.
- Built-in G-S Gate Protection Diode



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit	
Drain to source voltage	V_{DS}	100	V	
Gate to source voltage	V_{GS}	± 20	V	
Drain current (DC)	I_D	± 3.0	A	
Drain current(pulse) *	I_D	± 12	A	
Power dissipation	P_D	$T_c=25^\circ C$	2.0	W
		$T_a=25^\circ C$	1.0	W
Channel temperature	T_{ch}	150	$^\circ C$	
Storage temperature	T_{stg}	-55 to +150	$^\circ C$	

* $PW \leq 10ms$, duty cycle $\leq 5\%$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	I_{DSS}	$V_{DS}=100V, V_{GS}=0$			10	μA
Gate leakage current	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0$			± 10	μA
Gate to source cutoff voltage	$V_{GS(off)}$	$V_{DS}=10V, I_D=1mA$	1.0		2.5	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS}=10V, I_D=2A$	2.4			s
Drain to source on-state resistance	$R_{DS(on)}$	$V_{GS}=10V, I_D=2A$		0.26	0.32	Ω
		$V_{GS}=4.0V, I_D=2A$		0.32	0.40	Ω
Input capacitance	C_{iss}	$V_{DS}=10V, V_{GS}=0, f=1MHZ$		500		pF
Output capacitance	C_{oss}			160		pF
Reverse transfer capacitance	C_{rss}			20		pF
Turn-on delay time	$t_{d(on)}$			40		ns
Rise time	t_r	$I_D=2A, V_{GS(on)}=10V, R_L=25 \Omega, V_{DD}=50V, R_G=10 \Omega$		55		ns
Turn-off delay time	$t_{d(off)}$			500		ns
Fall time	t_f			120		ns