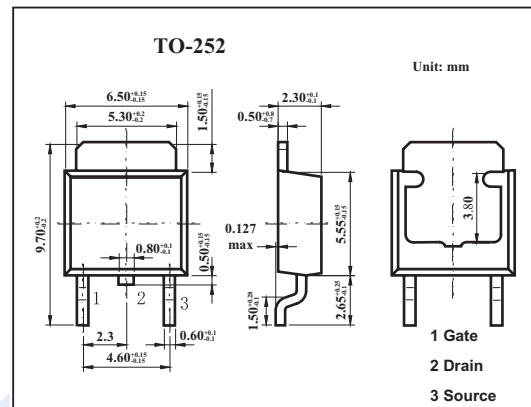
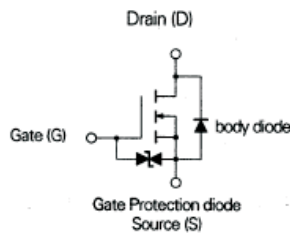


## MOS Field Effect Power Transistor

### 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	$V_{GS}$	$\pm 20$	V	
Drain current (DC)	$I_D$	$\pm 3.0$	A	
Drain current(pulse) *	$I_D$	$\pm 12$	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	$\mu A$
Gate leakage current	$I_{GSS}$	$V_{GS}=\pm 20V, V_{DS}=0$			$\pm 10$	$\mu A$
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	$\Omega$
		$V_{GS}=4.0V, I_D=2A$		0.32	0.40	$\Omega$
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