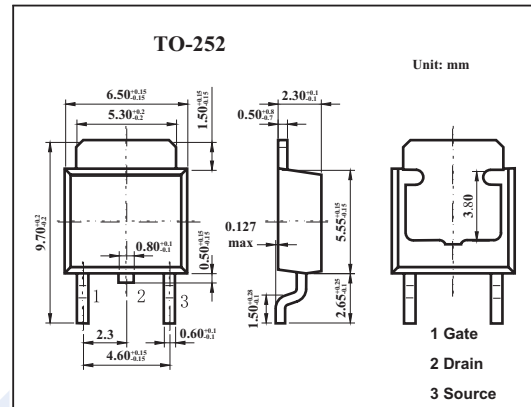


## Silicon N-Channel MOSFET 2SK2094

### ■ Features

- Low on-resistance
- Fast switching speed
- Low-voltage drive
- Easily designed drive circuits



### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain to source voltage	$V_{DS}$	60	V
Gate to source voltage	$V_{GS}$	$\pm 20$	V
Drain current	$I_D$	2	A
	$I_{Dp}$	8	A
Power dissipation	$P_D$	20	W
Channel temperature	$T_{ch}$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain cut-off current	$I_{DSS}$	$V_{DS}=60V, V_{GS}=0$			100	$\mu A$
Gate leakage current	$I_{GSS}$	$V_{GS}=\pm 20V, V_{DS}=0$			$\pm 100$	nA
Gate threshold voltage	$V_{GS(th)}$	$V_{DS}=10V, I_D=1mA$	1.0		2.5	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS}=10V, I_D=1A$	1.0			S
Drain to source on-state resistance	$R_{DS(on)}$	$V_{GS}=10V, I_D=1A$		0.3	0.35	$\Omega$
		$V_{GS}=4V, I_D=1A$		0.4	0.5	$\Omega$
Input capacitance	$C_{iss}$	$V_{DS}=10V, V_{GS}=0, f=1MHz$		400		pF
Output capacitance	$C_{oss}$			150		pF
Reverse transfer capacitance	$C_{rss}$			50		pF
Turn-on delay time	$t_{d(on)}$			10		ns
Rise time	$t_r$	$I_D=1A, V_{GS(on)}=10V, R_L=30\Omega, R_G=10\Omega$		20		ns
Turn-off delay time	$t_{d(off)}$			100		ns
Fall time	$t_f$			40		ns