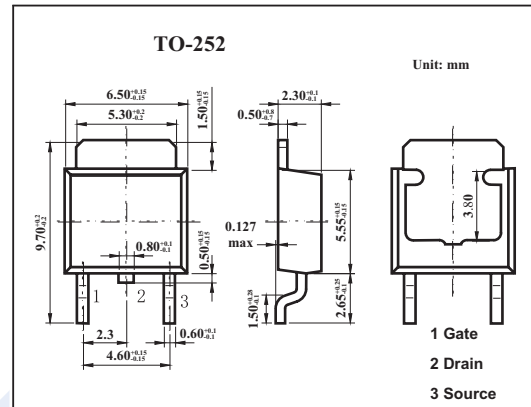


Silicon N-Channel MOSFET 2SK2094

■ 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}	± 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	μA
Gate leakage current	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0$			± 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	Ω
		$V_{GS}=4V, I_D=1A$		0.4	0.5	Ω
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