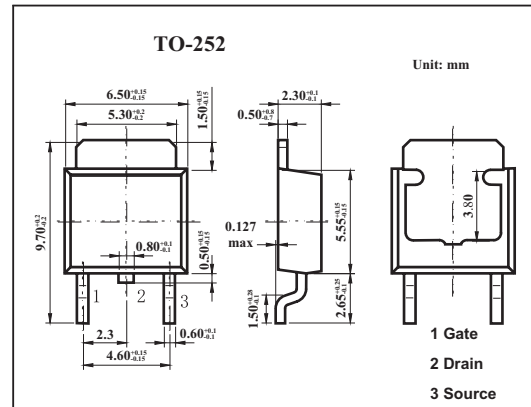


# 2SK2094

■ 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 <sub>DSS</sub>	60	V
Gate to source voltage	V <sub>GSS</sub>	±20	V
Drain current	I <sub>D</sub>	2	A
	I <sub>DP</sub>	8	A
Power dissipation	P <sub>D</sub>	20	W
Channel temperature	T <sub>ch</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain cut-off current	I <sub>DSS</sub>	V <sub>DS</sub> =60V, V <sub>GS</sub> =0			100	μA
Gate leakage current	I <sub>GSS</sub>	V <sub>GS</sub> =±20V, V <sub>DS</sub> =0			±100	nA
Gate threshold voltage	V <sub>GS(th)</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =1mA	1.0		2.5	V
Forward transfer admittance	Y <sub>fs</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =1A	1.0			S
Drain to source on-state resistance	R <sub>DS(on)</sub>	V <sub>GS</sub> =10V, I <sub>D</sub> =1A		0.3	0.35	Ω
		V <sub>GS</sub> =4V, I <sub>D</sub> =1A		0.4	0.5	Ω
Input capacitance	C <sub>iss</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0, f=1MHZ		400		pF
Output capacitance	C <sub>oss</sub>			150		pF
Reverse transfer capacitance	C <sub>rss</sub>			50		pF
Turn-on delay time	t <sub>d(on)</sub>			10		ns
Rise time	t <sub>r</sub>	I <sub>D</sub> =1A, V <sub>GS(on)</sub> =10V, R <sub>L</sub> =30 Ω, R <sub>G</sub> =10 Ω		20		ns
Turn-off delay time	t <sub>d(off)</sub>			100		ns
Fall time	t <sub>f</sub>			40		ns