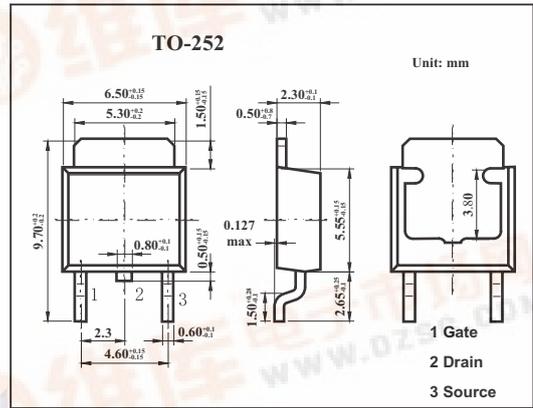


SMD Type MOSFET

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 _{DSS}	60	V
Gate to source voltage	V _{GSS}	±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} =±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	
Rise time	t _r	I _D =1A, V _{GS(on)} =10V, R _L =30 Ω, R _G =10 Ω		20		ns
Turn-off delay time	t _{d(off)}			100		ns
Fall time	t _f			40		ns

