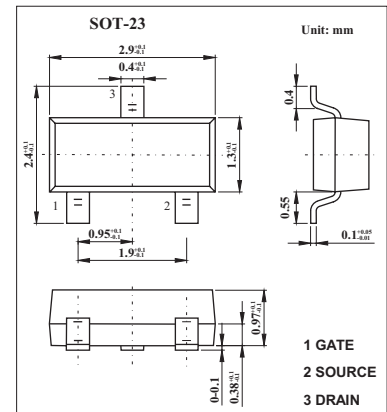
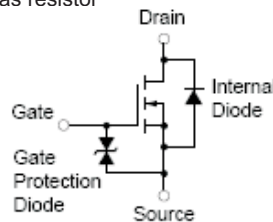


MOS Field Effect Transistor

2SK1399

■ Features

- Can be driven by a 3.0-V power source
- Not necessary to consider driving current because of it is high input impedance
- Possible to reduce the number of parts by omitting the bias resistor



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain to source voltage	V _{DS}	50	V
Gate to source voltage	V _{GS}	±7.0	V
Drain current (DC)	I _D	±100	mA
Drain current(pulse) *	I _D	±200	mA
Power dissipation	P _D	200	m W
Channel temperature	T _{ch}	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

* PW ≤ 10ms, duty cycle ≤ 5%

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	I _{DSS}	V _{DS} =50V, V _{GS} =0			10	μ A
Gate leakage current	I _{GSS}	V _{GS} =±7.0V, V _{DS} =0			±5.0	μ A
Gate to source cutoff voltage	V _{GS(off)}	V _{DS} =3.0V, I _D =1 μ A	0.9	1.2	1.5	V
Forward transfer admittance	Y _{fs}	V _{DS} =3.0V, I _D =10mA	20	38		ms
Drain to source on-state resistance	R _{DS(on)}	V _{GS} =2.5V, I _D =10mA		22	40	Ω
		V _{GS} =4.0V, I _D =10mA		14	20	Ω
Input capacitance	C _{iss}	V _{DS} =3.0V, V _{GS} =0, f=1MHZ		8		pF
Output capacitance	C _{oss}			7		pF
Reverse transfer capacitance	C _{rss}			3		pF
Turn-on delay time	t _{d(on)}	I _D =20mA, V _{GS(on)} =3V, R _L =150 Ω, V _{DD} =3.0V, R _G =10 Ω		15		ns
Rise time	t _r			100		ns
Turn-off delay time	t _{d(off)}			30		ns
Fall time	t _f			35		ns

■ Marking

Marking	G12
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