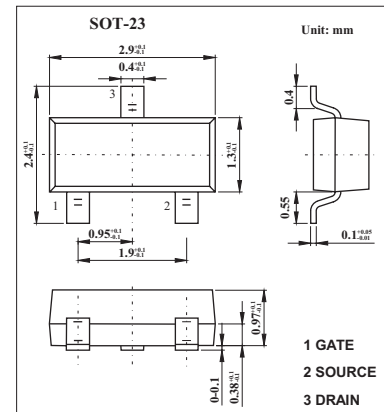
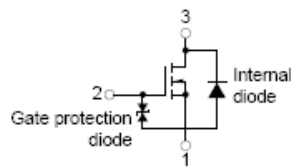


MOS Field Effect Transistor

2SK2158

■ Features

- Capable of drive gate with 1.5 V
- Because of high input impedance, there is no need to consider driving current.
- Bias resistance can be omitted, enabling reduction in total number of parts.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain to source voltage	V _{DSS}	50	V
Gate to source voltage	V _{GSS}	±7.0	V
Drain current	I _D	±0.1	A
	I _{DP} *	±0.2	A
Power dissipation	P _D	200	m W
Channel temperature	T _{ch}	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

* PW ≤ 10 μ s, Duty Cycle ≤ 1%

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain cut-off current	I _{DSS}	V _{DS} =50V, V _{GS} =0			1.0	μ A
Gate leakage current	I _{GSS}	V _{GS} =±7.0V, V _{DS} =0			±3.0	μ A
Gate to source cutoff voltage	V _{GS(off)}	V _{DS} =3V, I _D =10 μ A	0.5	0.7	1.1	V
Forward transfer admittance	Y _{fs}	V _{DS} =3V, I _D =10mA	20			ms
Drain to source on-state resistance	R _{DS(on)}	V _{GS} =1.5V, I _D =1.0mA		32	50	Ω
		V _{GS} =2.5V, I _D =10mA		16	20	Ω
		V _{GS} =4.0V, I _D =1.0mA		12	15	Ω
Input capacitance	C _{iss}	V _{DS} =3V, V _{GS} =0, f=1MHZ		6		pF
Output capacitance	C _{oss}			8		pF
Reverse transfer capacitance	C _{rss}			1		pF
Turn-on delay time	t _{d(on)}	I _D =20mA, V _{GS(on)} =3V, R _L =150 Ω, R _G =10 Ω, V _{DD} =3V		9		ns
Rise time	t _r			48		ns
Turn-off delay time	t _{d(off)}			21		ns
Fall time	t _f			31		ns

■ Marking

Marking	G23
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