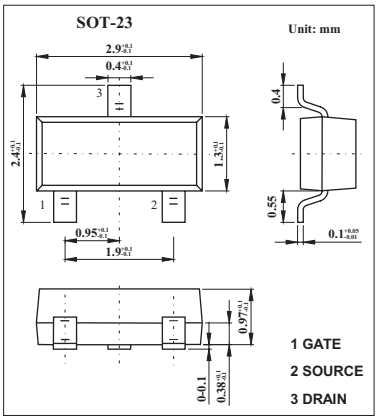
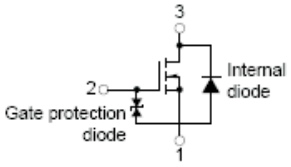
MOS Field Effect Transistor
2SK2158



■ 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℃

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	℃
Storage temperature	T_{stg}	-55 to +150	℃

* PW≤10μs,Duty Cycle≤1%

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	I_{DSS}	V_{DS}=50V,V_{GS}=0			1.0	μA
Gate leakage current	I_{GSS}	V_{GS}=±7.0V,V_{DS}=0			±3.0	μA
Gate to source cutoff voltage	$V_{GS(off)}$	V_{DS}=3V,I_D=10μA	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=150Ω,R_G=10Ω,V_{DD}=3V		9		ns
Rise time	tr			48		ns
Turn-off delay time	$t_{d(off)}$			21		ns
Fall time	tf			31		ns

■ Marking

Marking	G23