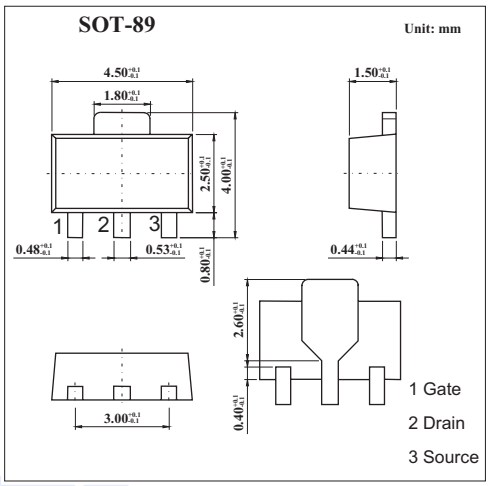
MOS Field Effect Transistor

2SK1273



Features

- Directly driver by Ics having a 5V power source.
- Has low on-satate resistance

  $R_{DS(on)}$=1.00Ω MAX.@V_{GS}=4.0V,I_D=0.5A

  $R_{DS(on)}$=0.65Ω MAX.@V_{GS}=10V,I_D=0.5A
- Not necessary to consider driving current because of its high input impedance.
- Possible to reduce the number of parts by omitting the biasresistor.

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain to source voltage	V_{DSS}	60	V
Gate to source voltage	V_{GSS}	±20	V
Drain current (DC)	I_D	±2.0	A
Drain current(pulse) *	I_D	±4.0	A
Power dissipation	P_D	2.0	W
Channel temperature	T_{ch}	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* PW≤ 10ms, duty cycle ≤ 50%

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	I_{DSS}	V_{DS}=60V,V_{GS}=0			10	μA
Gate leakage current	I_{GSS}	V_{GS}=±20V,V_{DS}=0			±10	μA
Gate to source cutoff voltage	$V_{GS(off)}$	V_{DS}=10V,I_D=1mA	1.0	1.7	2.5	V
Forward transfer admittance	$\|Y_{fs}\|$	V_{DS}=10V,I_D=0.5A	0.4			s
Drain to source on-state resistance	$R_{DS(on)}$	V_{GS}=4.0V,I_D=0.5A		0.31	1.00	Ω
		V_{GS}=10V,I_D=0.5A		0.24	0.65	Ω
Input capacitance	C_{iss}	V_{DS}=10V,V_{GS}=0,f=1MHZ		220		pF
Output capacitance	C_{oss}			105		pF
Reverse transfer capacitance	C_{rss}			16		pF
Turn-on delay time	$t_{d(on)}$	I_D=0.5A,$V_{GS(on)}$=10V,R_L=50Ω,V_{DD}=25V,R_G=10Ω		15		ns
Rise time	t_r			35		ns
Turn-off delay time	$t_{d(off)}$			380		ns
Fall time	t_f			120		ns

Marking

Marking	NA