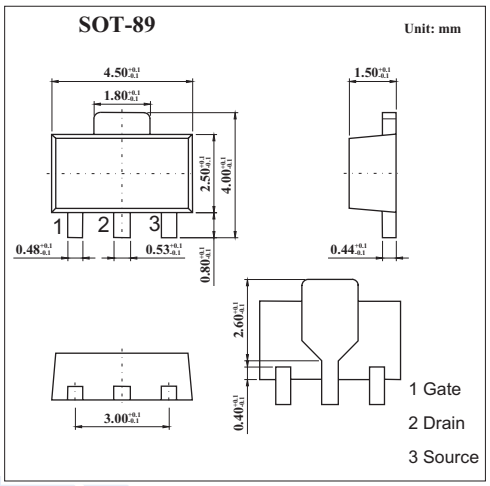
MOS Field Effect Transistor

2SK1583



Features

- Can be driven by Ics having a3V single power supply.
- Has low on-state resistance

  $R_{DS(on)}$=2.0Ω MAX.@V_{GS}=2.5V,I_D=0.3A

  $R_{DS(on)}$=1.5Ω MAX.@V_{GS}=4.0V,I_D=0.3A

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain to source voltage	V_{DSS}	16	V
Gate to source voltage	V_{GSS}	±16	V
Drain current (DC)	I_D	±0.5	A
Drain current(pulse) *	I_D	±1.0	A
Power dissipation	P_D	2.0	W
Channel temperature	T_{ch}	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* PW≤ 10ms, duty cycle ≤ 5%

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	I_{DSS}	V_{DS}=16V,V_{GS}=0			10	μA
Gate leakage current	I_{GSS}	V_{GS}=±16V,V_{DS}=0			±10	μA
Gate to source cutoff voltage	$V_{GS(off)}$	V_{DS}=5.0V,I_D=10mA	0.9	1.2	1.5	V
Forward transfer admittance	| Y_{fs} |	V_{DS}=5.0V,I_D=0.3A	20	60		ms
Drain to source on-state resistance	$R_{DS(on)}$	V_{GS}=2.5V,I_D=0.3A		1.8	2.0	Ω
		V_{GS}=4.0V,I_D=0.3A		0.8	1.5	Ω
Input capacitance	C_{iss}	V_{DS}=5.0V,V_{GS}=0,f=1MHZ		60		pF
Output capacitance	C_{oss}			70		pF
Reverse transfer capacitance	C_{rss}			15		pF
Turn-on delay time	$t_{d(on)}$	I_D=0.3A,$V_{GS(on)}$=3V,R_L=33Ω,V_{DD}=10V,R_G=10Ω		95		ns
Rise time	t_r			360		ns
Turn-off delay time	$t_{d(off)}$			160		ns
Fall time	t_f			150		ns

Marking

Marking	ND