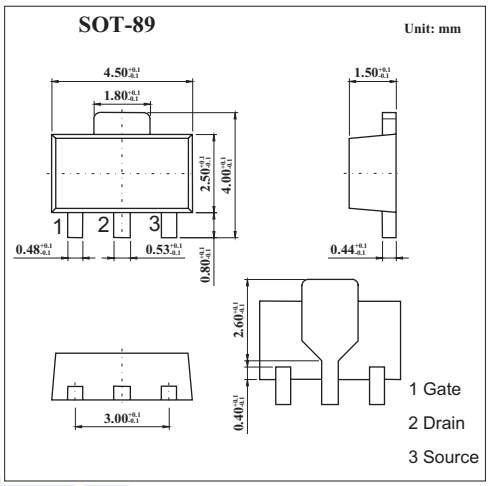
MOS Field Effect Transistor

2SK1584



Features

- Directly driven by Ics having a 5V P
- Has low on-state resistance

  $R_{DS(on)}$=2.0Ω MAX.@V_{GS}=4.0V,I_D=0.3A

  $R_{DS(on)}$=1.5Ω MAX.@V_{GS}=10V,I_D=0.3A

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain to source voltage	V_{DSS}	30	V
Gate to source voltage	V_{GSS}	±20	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}=30V,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=0.1mA	1.3	1.85	2.5	V
Forward transfer admittance	$\|Y_{fs}\|$	V_{DS}=5.0V,I_D=0.5A	350	440		ms
Drain to source on-state resistance	$R_{DS(on)}$	V_{GS}=4.0V,I_D=0.3A		1.2	2.0	Ω
		V_{GS}=10V,I_D=0.3A		0.65	1.5	Ω
Input capacitance	C_{iss}	V_{DS}=5.0V,V_{GS}=0,f=1MHZ		60		pF
Output capacitance	C_{oss}			50		pF
Reverse transfer capacitance	C_{rss}			9		pF
Turn-on delay time	$t_{d(on)}$	I_D=0.3A,$V_{GS(on)}$=4V,R_L=33Ω,V_{DD}=10V,R_G=10Ω		80		ns
Rise time	t_r			270		ns
Turn-off delay time	$t_{d(off)}$			100		ns
Fall time	t_f			110		ns

Marking

Marking	NH