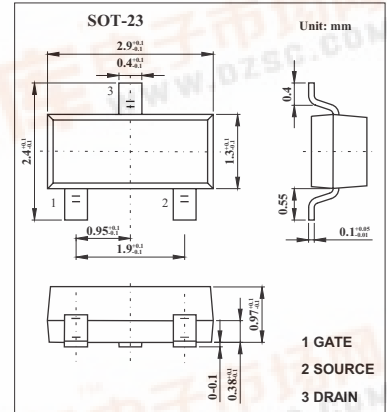


SMD Type MOSFET

MOS Field Effect Transistor 2SK1581

■ Features

- Can be driven by lcs having a 3V single power supply.
- Not necessary to consider driving current because of its thgh input impedance.
- Possible to reduce the number of parts by omitting the bias resistor



■ Absolute Maximum Ratings Ta = 25°C

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	± 200	mA
Drain current(pulse) *	I _D	± 400	mA
Power dissipation	P _D	200	mW
Channel temperature	T _{ch}	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

* PW ≤ 10ms, duty cycle ≤ 5%

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	I _{DSS}	V _{DS} =16V, V _{GS} =0			10	μ A
Gate leakage current	I _{GSS}	V _{GS} =± 3V, V _{DS} =0			± 10	μ A
Gate to source cutoff voltage	V _{GS(off)}	V _{DS} =3.0V, I _D =10 μ A	0.9	1.2	1.5	V
Forward transfer admittance	Y _{fs}	V _{DS} =3.0V, I _D =10mA	20	70		ms
Drain to source on-state resistance	R _{DS(on)}	V _{GS} =2.5V, I _D =1mA		3.2	5.0	Ω
		V _{GS} =4.0V, I _D =1mA		2.2	3.0	Ω
Input capacitance	C _{iss}	V _{DS} =3.0V, V _{GS} =0, f=1MHZ		27		pF
Output capacitance	C _{oss}			37		pF
Reverse transfer capacitance	C _{rss}			8		pF
Turn-on delay time	t _{d(on)}				100	
Rise time	t _r	I _D =10mA, V _{GS(on)} =3.0V, R _L =300 Ω, V _{DD} =3.0V, R _G =10 Ω		300		ns
Turn-off delay time	t _{d(off)}			210		ns
Fall time	t _f			240		ns

■ Marking

Marking	G14
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