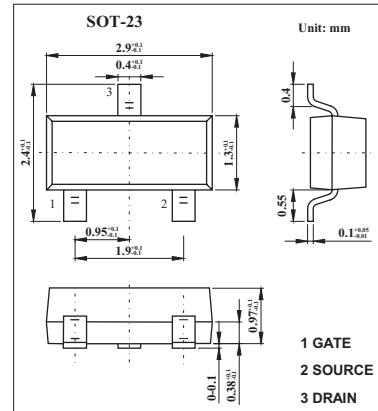


## MOS Field Effect Transistor

### 2SK1828

#### ■ Features

- 2.5V Gate Drive
- Low Threshold Voltage : $V_{th}=0.5$  to  $1.5V$
- High Speed



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain to source voltage	V <sub>DSS</sub>	20	V
Gate to source voltage	V <sub>GSS</sub>	10	V
Drain current	I <sub>D</sub>	50	mA
Power dissipation	P <sub>D</sub>	200	m W
Channel temperature	T <sub>ch</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

\* PW ≤ 10ms, duty cycle ≤ 5%

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain source breakdown voltage	V <sub>BDSS</sub>	I <sub>D</sub> =100 μA, V <sub>GS</sub> =0	20			V
Drain cut-off current	I <sub>DS</sub>	V <sub>DS</sub> =20V, V <sub>GS</sub> =0			1.0	μ A
Gate leakage current	I <sub>GS</sub>	V <sub>GS</sub> =10V, V <sub>DS</sub> =0			1	μ A
Forward transfer admittance	Y <sub>fs</sub>	V <sub>DS</sub> =3.0V, I <sub>D</sub> =10mA	20			ms
Drain to source on-state resistance	R <sub>DSS(on)</sub>	V <sub>GS</sub> =2.5V, I <sub>D</sub> =10mA		25	40	Ω
Input capacitance	C <sub>iss</sub>	V <sub>DS</sub> =3.0V, V <sub>GS</sub> =0, f=1MHZ		5.5		pF
Output capacitance	C <sub>oss</sub>			1.6		pF
Reverse transfer capacitance	C <sub>rss</sub>			6.5		pF
Switching time turn on time	t <sub>on</sub>	I <sub>D</sub> =10mA, V <sub>GS(on)</sub> =0 to 2.5V, V <sub>DD</sub> =3.0V		0.14		μ s
Switching time turn off time	t <sub>off</sub>			0.14		μ s

#### ■ Marking

Marking	KI
---------	----