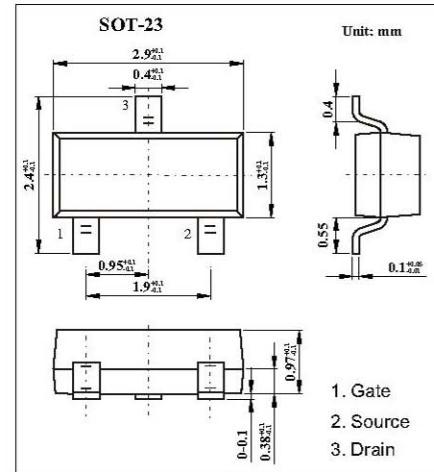
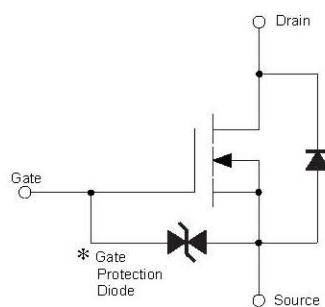


## ● Features

- Low on-resistance.
- Fast switching speed.
- Silicon N-channel MOSFET
- Drive circuits can be simple.



## ● Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain-source voltage	V <sub>DSS</sub>	30	V
Gate-source voltage	V <sub>GSS</sub>	±20	V
Drain current	I <sub>D</sub>	100	mA
	I <sub>DP</sub> <sup>*1</sup>	400	
Total power dissipation	P <sub>D</sub> <sup>*2</sup>	200	mW
Channel to ambient	R <sub>th(ch-a)</sub> <sup>*2</sup>	625	°C/W
Channel Temperature	T <sub>ch</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

\*1. P<sub>w</sub>≤10μs, duty cycle≤1%.

\*2. With each pin mounted on the recommended lands.

## ● Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Gate-source leakage	I <sub>GSS</sub>	V <sub>GS</sub> = ±20 V , V <sub>DS</sub> = 0 V			±1	μA
Drain-source Breakdown voltage	V <sub>(BR)DSS</sub>	I <sub>D</sub> = 10 μA, V <sub>GS</sub> = 0V	30			V
Zero gate voltage drain current	I <sub>DSS</sub>	V <sub>DS</sub> = 30 V, V <sub>GS</sub> = 0V			1	μA
Gate threshold voltage	V <sub>GS(th)</sub>	V <sub>DS</sub> = 3 V, I <sub>D</sub> = 100 μA	0.8		1.5	V
Static drain-source on-state resistance	R <sub>D(on)</sub>	I <sub>D</sub> = 10 mA, V <sub>GS</sub> = 4V I <sub>D</sub> = 1mA, V <sub>GS</sub> = 2.5V		5 7	8 13	Ω
Forward transfer admittance	Y <sub>fs</sub>	V <sub>DS</sub> = 3 V, I <sub>D</sub> = 10 mA	20			mS
Input capacitance	C <sub>iss</sub>	V <sub>DS</sub> = 5 V,		13		pF
Output capacitance	C <sub>oss</sub>	V <sub>DS</sub> = 0 V,		9		pF
Reverse transfer capacitance	C <sub>rss</sub>	f = 1MHz		4		pF
Turn-on delay time	t <sub>d(on)</sub>	I <sub>D</sub> = 10 mA, V <sub>DD</sub> = 5 V,		15		ns
Rise time	t <sub>r</sub>	V <sub>GS</sub> = 5 V,		35		ns
Turn-off time	t <sub>d(off)</sub>	R <sub>L</sub> = 500 Ω		80		ns
Fall time	t <sub>r</sub>	R <sub>G</sub> = 10 Ω		80		ns