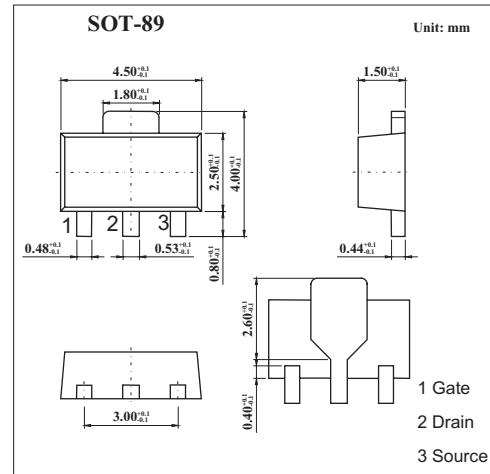


## Silicon N-Channel MOSFET

### 2SK3065

#### ■ Features

- Low on resistance.
  - High-speed switching.
  - Optimum for a pocket resource etc. because of undervoltage actuation (2.5V actuation).
  - Driving circuit is easy.
  - Easy to use parallel.
- It is strong to an electrostatic discharge.



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

Parameter	Symbol	Rating	Unit
Drain to source voltage	V <sub>DSS</sub>	60	V
Gate to source voltage	V <sub>GSS</sub>	±20	V
Drain current	I <sub>D</sub>	2	A
	I <sub>Dp</sub> *	8	A
Power dissipation T <sub>c</sub> =25°C	P <sub>D</sub>	0.5	W
Channel temperature	T <sub>ch</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

\* PW≤10 μ s,Duty Cycle≤1%

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain to source breakdown voltage	V <sub>DSS</sub>	I <sub>D</sub> =1mA,V <sub>Gs</sub> =0	60			V
Drain cut-off current	I <sub>DSS</sub>	V <sub>Ds</sub> =60V,V <sub>Gs</sub> =0			10	μ A
Gate leakage current	I <sub>GSS</sub>	V <sub>Gs</sub> =±20V,V <sub>Ds</sub> =0			±10	μ A
Gate threshold voltage	V <sub>GS(th)</sub>	V <sub>Ds</sub> =10V,I <sub>D</sub> =1mA	0.8		1.5	V
Forward transfer admittance	Y <sub>fs</sub>	V <sub>Ds</sub> =10V,I <sub>D</sub> =1A	1.5			S
Drain to source on-state resistance	R <sub>Ds(on)</sub>	V <sub>Gs</sub> =4V,I <sub>D</sub> =1A		0.25	0.32	Ω
		V <sub>Gs</sub> =2.5V,I <sub>D</sub> =1A		0.35	0.45	Ω
Input capacitance	C <sub>iss</sub>	V <sub>Ds</sub> =10V,V <sub>Gs</sub> =0,f=1MHZ		160		pF
Output capacitance	C <sub>oss</sub>			85		pF
Reverse transfer capacitance	C <sub>rss</sub>			25		pF
Turn-on delay time	t <sub>on</sub>	I <sub>D</sub> =1A,V <sub>GS(on)</sub> =4V,R <sub>L</sub> =30Ω ,V <sub>DD</sub> =30V,R <sub>G</sub> =10Ω		20		ns
Rise time	t <sub>r</sub>			50		ns
Turn-off delay time	t <sub>off</sub>			120		ns
Fall time	t <sub>f</sub>			70		ns

#### ■ Marking

Marking	KE
---------	----