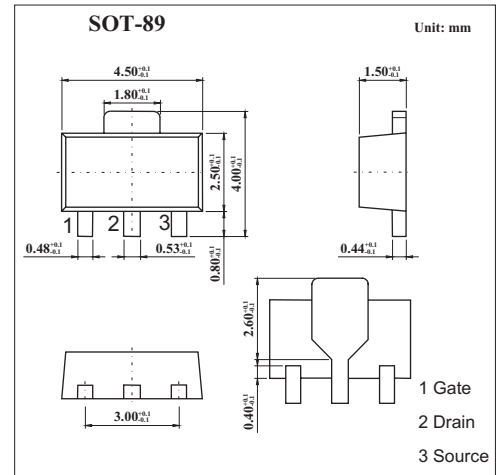


## Silicon N-Channel MOSFET 2SK3065

### ■ 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 μs, 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	μA
Gate leakage current	I <sub>GSS</sub>	V <sub>GS</sub> =±20V, V <sub>DS</sub> =0			±10	μA
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
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