

# 3SK304(Tentative), 3SK308(Tentative)

Silicon N-Channel MOS

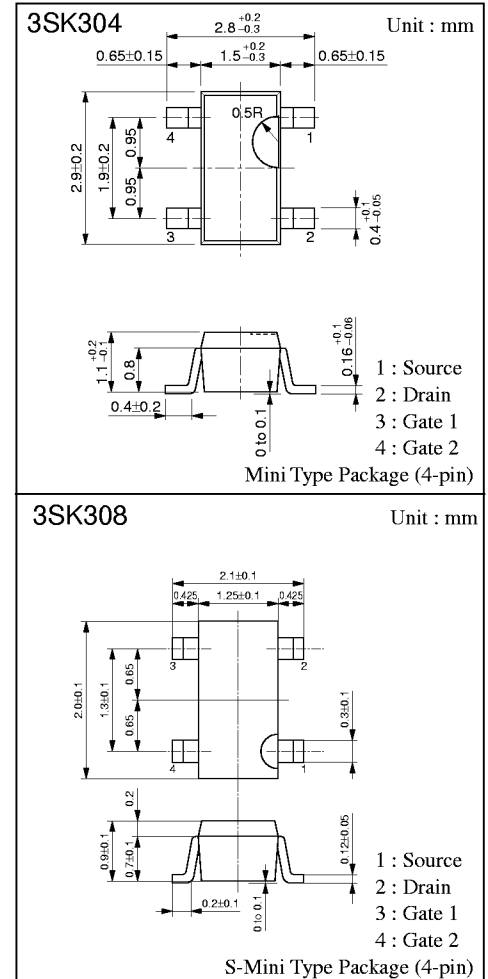
For UHF amplification

### ■ Features

- Though low voltage operation, performance is equivalent to the conventional product.
- Downsizing of sets by mini or S-mini type package, and automatic insertion by taping/magazine packing are available.

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

Parameter	Symbol	Rating	Unit
Drain-Source voltage	V <sub>DS</sub>	15	V
Gate 1-Source voltage	V <sub>G1S</sub>	±8	V
Gate 2-Source voltage	V <sub>G2S</sub>	±8	V
Drain current	I <sub>DS</sub>	30	mA
Allowable power dissipation	P <sub>D</sub>	150	mW
Channel temperature	T <sub>ch</sub>	150	°C
Storage temperature	T <sub>stg</sub>	- 55 to +150	°C



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

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Drain current	I <sub>DS</sub>	V <sub>DS</sub> =10V, V <sub>G1S</sub> =1V, V <sub>G2S</sub> = 3V	0	5	10	mA
Gate 1 cut-off current	I <sub>G1SS</sub>	V <sub>DS</sub> =V <sub>G2S</sub> = 0, V <sub>G1S</sub> = ±8V			±20	nA
Gate 2 cut-off current	I <sub>G2SS</sub>	V <sub>DS</sub> =V <sub>G1S</sub> = 0, V <sub>G2S</sub> = ±8V			±20	nA
Gate 1-Source cut-off voltage	V <sub>G1SC</sub>	V <sub>DS</sub> =10V, V <sub>G2S</sub> = 3V, I <sub>D</sub> = 100μA	0	0.6	1	V
Gate 2-Source cut-off voltage	V <sub>G2SC</sub>	V <sub>DS</sub> =10V, V <sub>G1S</sub> = 3V, I <sub>D</sub> = 100μA	0.2	0.7	1.2	V
Drain-Source voltage	V <sub>DSX</sub>	I <sub>D</sub> = 50μA, V <sub>G1S</sub> = -5V, V <sub>G2S</sub> = 0	15			V
Forward transadmittance	Y <sub>fs</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =10mA, V <sub>G2S</sub> = 3V	22	27	35	mS
Input capacitance	C <sub>iss</sub>	V <sub>DS</sub> =10V, V <sub>G1S</sub> = V <sub>G2S</sub> = -5V, f=1MHz	1.2	1.8	2.5	pF
Output capacitance	C <sub>oss</sub>		0.7	1	1.3	pF
Feedback capacitance	C <sub>rss</sub>			0.02		pF
Power gain	PG	V <sub>DS</sub> = 8V, I <sub>D</sub> = 8mA, V <sub>G2S</sub> = 3V,	14	17	20	dB
Noise figure	NF	f= 800MHz		2.2	3	dB

### ■ Marking

