

**3SK303(Tentative), 3SK307(Tentative)**

Silicon N-Channel MOS

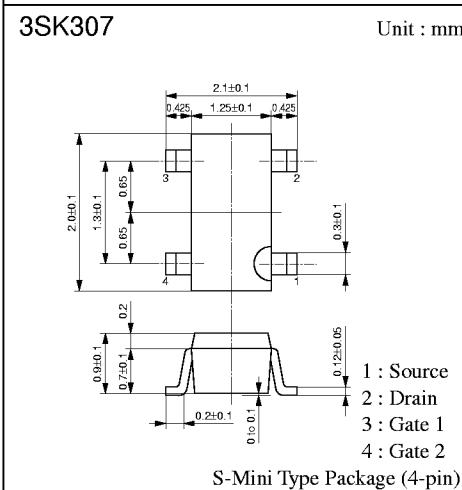
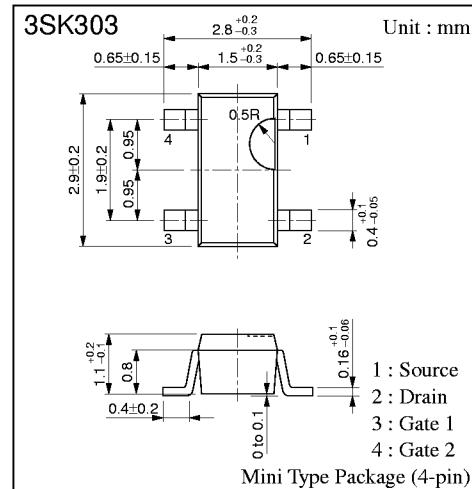
For VHF amplification

**■ 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	3	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>G2S</sub> =0, V <sub>G1S</sub> =±8V			±20	nA
Gate 1-Source cut-off voltage	V <sub>G1SC</sub>	V <sub>DS</sub> =10V, V <sub>G2S</sub> =4V, I <sub>DS</sub> =100µA	0	0.7	1	V
Gate 2-Source cut-off voltage	V <sub>G2SC</sub>	V <sub>DS</sub> =10V, V <sub>G2S</sub> =4V, I <sub>DS</sub> =100µA	0.2	0.7	1.2	V
Drain-Source voltage	V <sub>DSX</sub>	I <sub>DS</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>DS</sub> =10mA, V <sub>G2S</sub> =3V	18	22	28	mS
Input capacitance	C <sub>iss</sub>	V <sub>DS</sub> =10V, V <sub>G1S</sub> =V <sub>G2S</sub> =-5V, f=1MHz	2	2.4	3.2	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>DS</sub> =8mA, V <sub>G2S</sub> =3V, f= 200MHz	19	23	28	dB
Noise figure	NF			2.3	3.2	dB

**■ Marking**