

3SK301(Tentative), 3SK305(Tentative)

Silicon N-Channel MOS

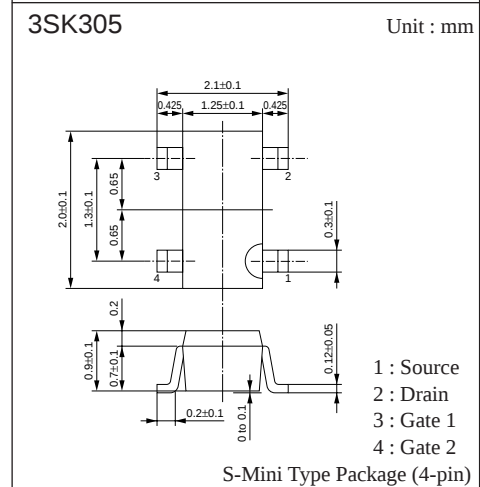
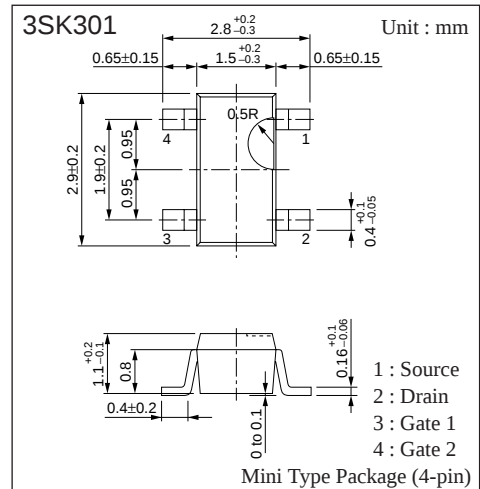
For VHF amplification

■ 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_{DS}	15	V
Gate 1-Source voltage	V_{G1S}	± 8	V
Gate 2-Source voltage	V_{G2S}	± 8	V
Drain current	I_{DS}	± 30	mA
Allowable power dissipation	P_D	150	mW
Channel temperature	T_{ch}	150	°C
Storage temperature	T_{stg}	- 55 to +150	°C



■ Electrical Characteristics (Ta = 25°C)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Drain current	I_{DS}	$V_{DS}=3.5V, V_{G1S}=1.5V, V_{G2S}=3V$	5	15	23	mA
Gate 1 cut-off current	I_{G1SS}	$V_{DS}=V_{G2S}=0, V_{G1S}=\pm 8V$			± 20	nA
Gate 2 cut-off current	I_{G2SS}	$V_{DS}=V_{G1S}=0, V_{G2S}=\pm 8V$			± 20	nA
Gate 1-Source cut-off voltage	V_{G1SC}	$V_{DS}=3.5V, V_{G2S}=3V, I_D=100\mu A$	0	0.6	1.3	V
Gate 2-Source cut-off voltage	V_{G2SC}	$V_{DS}=3.5V, V_{G1S}=3V, I_D=100\mu A$	0.15	0.65	1.35	V
Drain-Source voltage	V_{DSX}	$I_D=50\mu A, V_{G1S}=-5V, V_{G2S}=0$	15			V
Forward transadmittance	$ Y_{fs} $	$V_{DS}=3.5V, I_D=10mA, V_{G2S}=3V$	17	23	29	mS
Input capacitance	C_{iss}	$V_{DS}=10V, V_{G1S}=V_{G2S}=-5V, f=1MHz$	2	2.7	3.5	pF
Output capacitance	C_{oss}		1	1.3	1.5	pF
Feedback capacitance	C_{rss}				0.02	pF
Power gain	PG	$V_{DS}=3.5V, I_D=8mA, V_{G2S}=3V, f=200MHz$	23.5	25.5	28.5	dB
Noise figure	NF			2.3	2.6	dB

■ Marking

