3SK303(Tentative), 3SK307(Tentative)

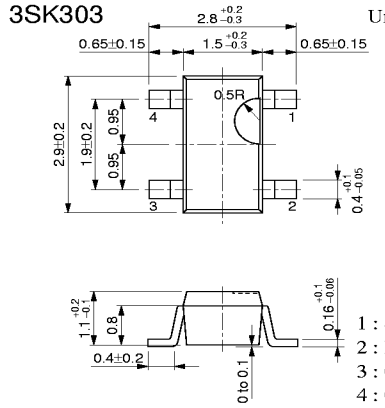
Silicon N-Channel MOS

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.

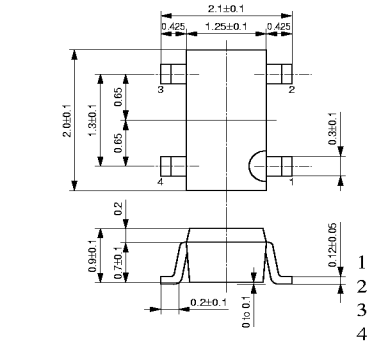
3SK303 Unit : mm



1 : Source
2 : Drain
3 : Gate 1
4 : Gate 2

Mini Type Package (4-pin)

3SK307 Unit : mm



1 : Source
2 : Drain
3 : Gate 1
4 : Gate 2

S-Mini Type Package (4-pin)

■ 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}=10V, V_{G1S}=1V, V_{G2S}= 3V	0	3	10	mA
Gate 1 cut-off current	I_{G1SS}	V_{DS}= V_{G2S}= 0, V_{G1S}= ±8V			±20	nA
Gate 2 cut-off current	I_{G2SS}	V_{DS}=V_{G2S}= 0, V_{G1S}= ±8V			±20	nA
Gate 1-Source cut-off voltage	V_{G1SC}	V_{DS}=10V, V_{G2S}= 4V, I_{DS}=100µA	0	0.7	1	V
Gate 2-Source cut-off voltage	V_{G2SC}	V_{DS}=10V, V_{G2S}= 4V, I_{DS}=100µA	0.2	0.7	1.2	V
Drain-Source voltage	V_{DSX}	I_{DS}=50µA, V_{G1S}= – 5V, V_{G2S}= 0	15			V
Forward transadmittance	$\|Y_{fs}\|$	V_{DS}=10V, I_{DS}=10mA, V_{G2S}= 3V	18	22	28	mS
Input capacitance	C_{iss}	V_{DS}=10V, V_{G1S}= V_{G2S}= –5V, f=1MHz	2	2.4	3.2	pF
Output capacitance	C_{oss}		0.7	1	1.3	pF
Feedback capacitance	C_{rss}			0.02		pF
Power gain	PG	V_{DS}= 8V, I_{DS}= 8mA, V_{G2S}= 3V, f= 200MHz	19	23	28	dB
Noise figure	NF			2.3	3.2	dB

■ Marking