

# 3SK268

## Silicon N-Channel 4-pin MOS

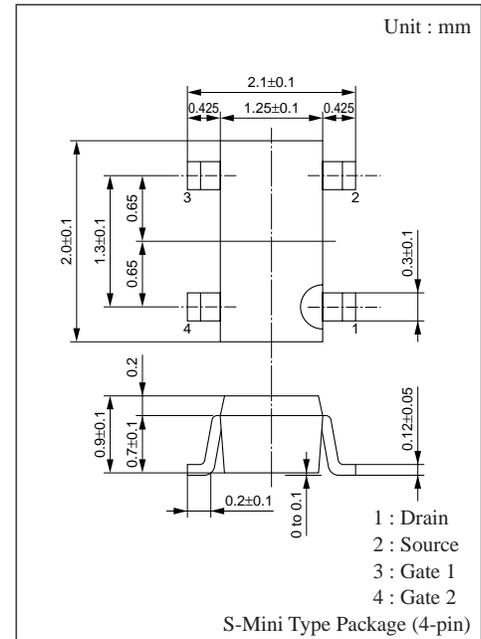
For VHF amplification

### ■ Features

- Low noise-figure (NF)
- Large power gain PG
- Downsizing of sets by S-mini power 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>D</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

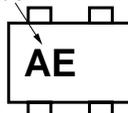


### ■ Electrical Characteristics (Ta = 25°C)

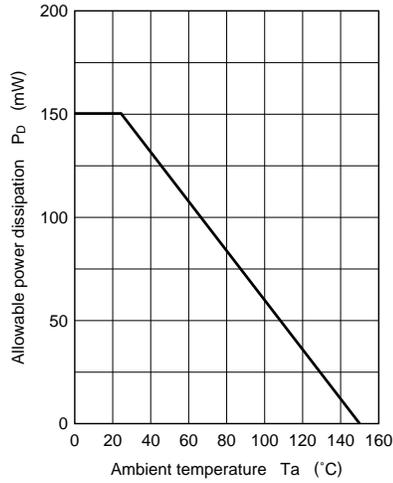
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Drain-Source cut-off current	I <sub>DSS</sub>	V <sub>DS</sub> =10V, V <sub>G1S</sub> = 0, V <sub>G2S</sub> = 4V	0		8	mA
Gate 1 cut-off current	I <sub>G1SS</sub>	V <sub>DS</sub> =V <sub>G2S</sub> = 0, V <sub>G1S</sub> = ±8V			±20	nA
Gate 2 cut-off current	I <sub>G2SS</sub>	V <sub>DS</sub> =V <sub>G1S</sub> = 0, V <sub>G2S</sub> = ±8V			±20	nA
Drain-Source voltage	V <sub>DSSX</sub>	I <sub>D</sub> = 50μA, V <sub>G1S</sub> = -5V, V <sub>G2S</sub> = 0	15			V
Gate 1-Source cut-off voltage	V <sub>G1SC</sub>	V <sub>DS</sub> =10V, V <sub>G2S</sub> = 4V, I <sub>D</sub> =100μA	-1.5		0.5	V
Gate 2-Source cut-off voltage	V <sub>G2SC</sub>	V <sub>DS</sub> =10V, V <sub>G1S</sub> = 4V, I <sub>D</sub> =100μA	-1.5		0.5	V
Forward transadmittance	Y <sub>fs</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =10mA, V <sub>G2S</sub> = 4V, f=1kHz	14	20	26	mS
Input capacitance	C <sub>iss</sub>	V <sub>DS</sub> =10V, V <sub>G1S</sub> =V <sub>G2S</sub> = -5V, f=1MHz	3.5	5	6.2	pF
Output capacitance	C <sub>oss</sub>		1	1.5	2.2	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,	15	20		dB
Noise figure	NF	f=190 to 210MHz(Sweep)		1.7	3	dB

### ■ Marking

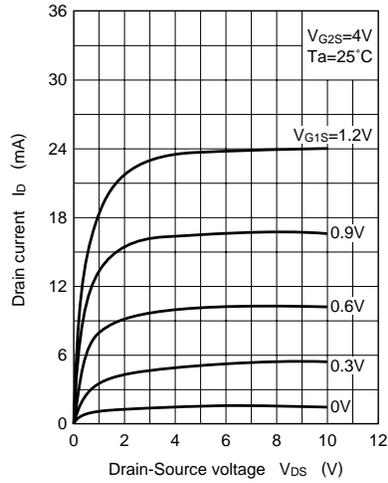
Part Number



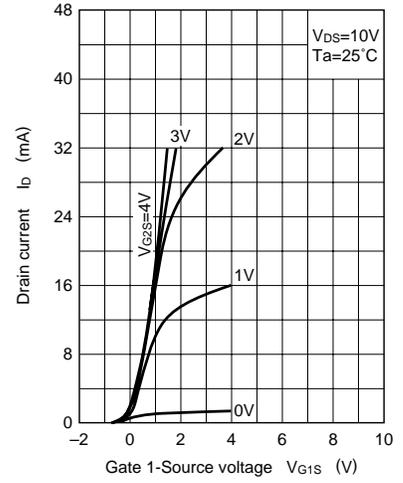
$P_D - T_a$



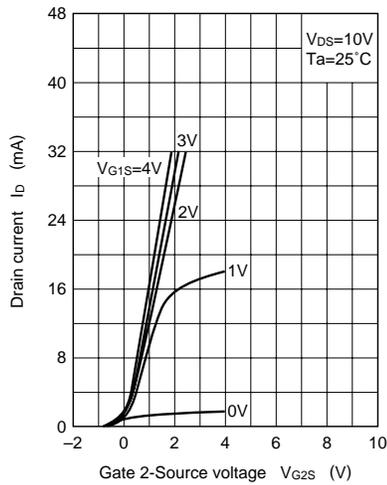
$I_D - V_{DS}$



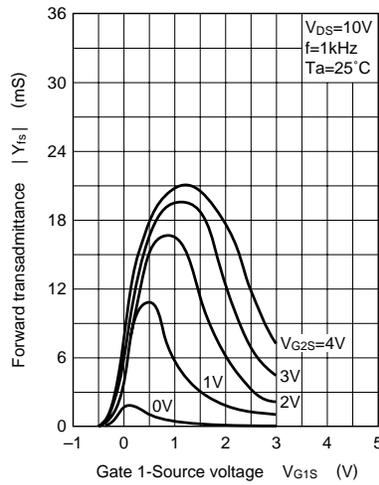
$I_D - V_{G1S}$



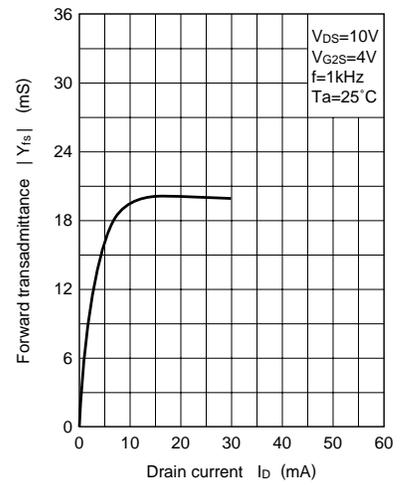
$I_D - V_{G2S}$



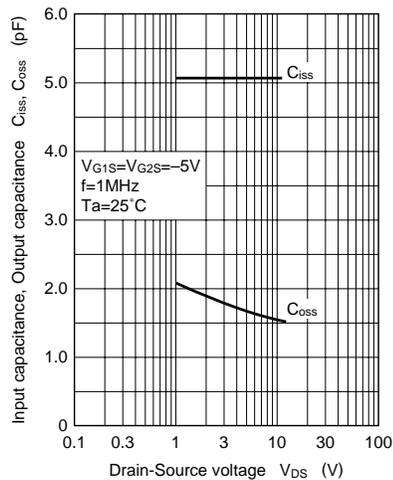
$|Y_{fs}| - V_{G1S}$



$|Y_{fs}| - I_D$



$C_{iss}, C_{oss} - V_{DS}$



$I_D - V_{G1S}$

