

3SK269

Silicon N-Channel 4-pin MOS

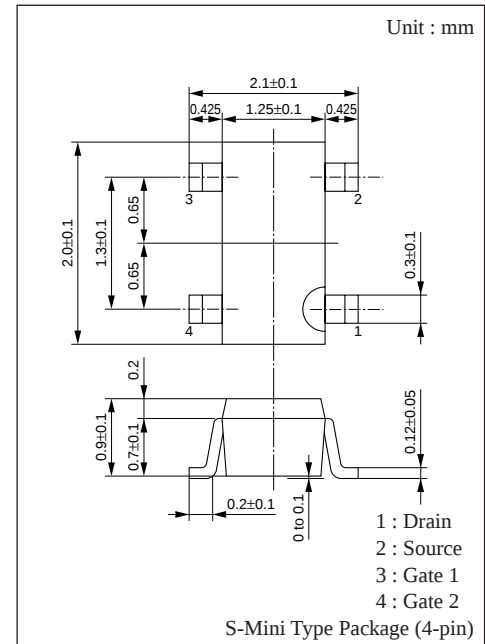
For VHF amplification

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

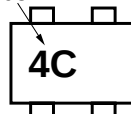


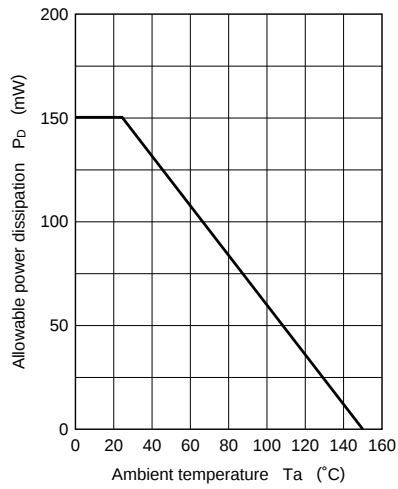
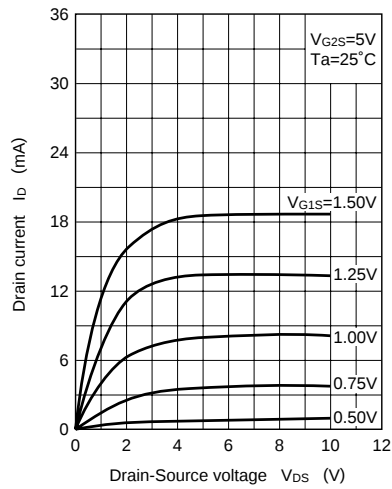
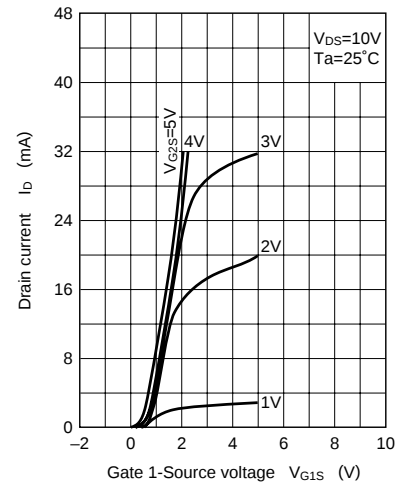
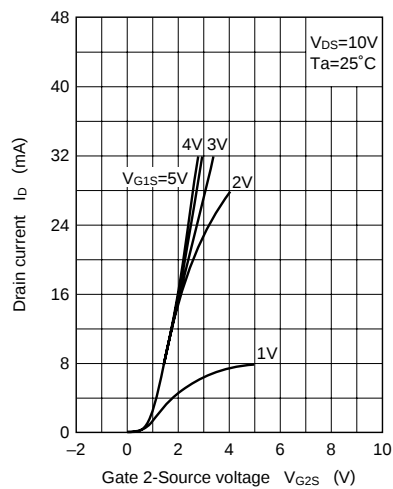
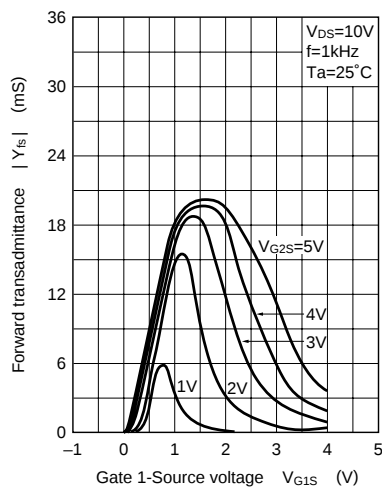
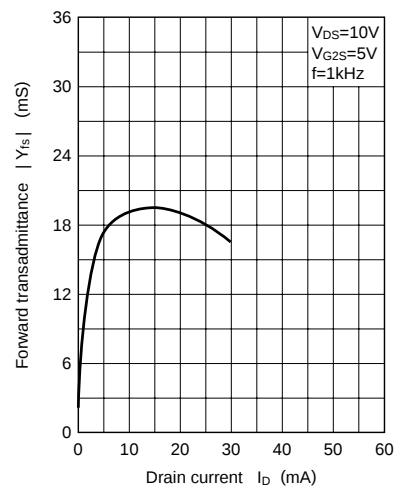
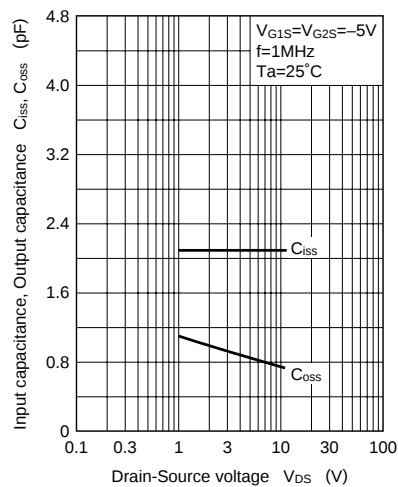
■ Electrical Characteristics (Ta = 25°C)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Drain current	I_{DSS}	$V_{DS}=10V, V_{G1S}=1, V_{G2S}=5V$	4		20	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
Drain-Source voltage	V_{DSX}	$I_D=50\mu A, V_{G1S}=-5V, V_{G2S}=0$	15			V
Gate 1-Source cut-off voltage	V_{G1SC}	$V_{DS}=10V, V_{G2S}=5V, I_D=100\mu A$	- 3		1	V
Gate 2-Source cut-off voltage	V_{G2SC}	$V_{DS}=10V, V_{G1S}=5V, I_D=100\mu A$	0		1	V
Forward transadmittance	$ Y_{fs} $	$V_{DS}=10V, I_D=10mA, V_{G2S}=5V, f=1kHz$	14	20	26	mS
Input capacitance	C_{iss}	$V_{DS}=10V, V_{G1S}=V_{G2S}=-5V, f=1MHz$	1.3	1.8	2.3	pF
Output capacitance	C_{oss}			0.8	1.2	pF
Feedback capacitance	C_{rss}			0.02		pF
Power gain	PG	$V_{DS}=6V, I_D=8mA, V_{G2S}=4V, f=790 \text{ to } 810MHz(\text{Sweep})$	11.5	18.5		dB
Noise figure	NF			2.2	4	dB

■ Marking

Part Number



$P_D - T_a$  $I_D - V_{DS}$  $I_D - V_{G1S}$  $I_D - V_{G2S}$  $|Y_{fs}| - V_{G1S}$  $|Y_{fs}| - I_D$  $C_{iss}, C_{oss} - V_{DS}$  $I_D - V_{G1S}$ 