

2SK0065 (2SK65)

Silicon N-Channel Junction FET

For impedance conversion in low frequency

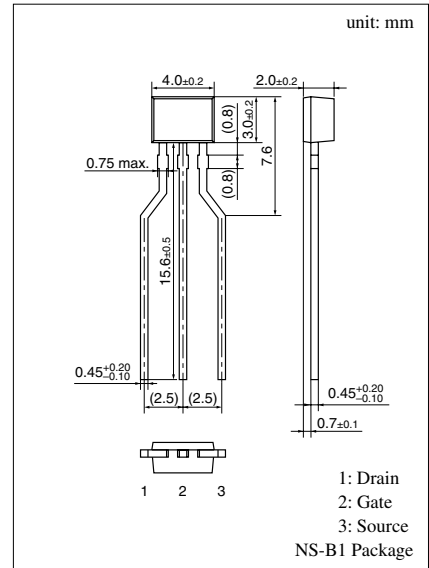
For electret capacitor microphone

■ Features

- Diode is connected between gate and source
- Low noise voltage

■ Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Ratings	Unit
Drain to Source voltage	V_{DSO}	12	V
Gate to Drain voltage	V_{GDO}	-12	V
Drain to Source current	I_{DSO}	2	mA
Drain to Gate current	I_{DGO}	2	mA
Gate to Source current	I_{GSO}	2	mA
Allowable power dissipation	P_D	20	mW
Operating ambient temperature	T_{opr}	-10 to +70	°C
Storage temperature	T_{stg}	-20 to +150	°C



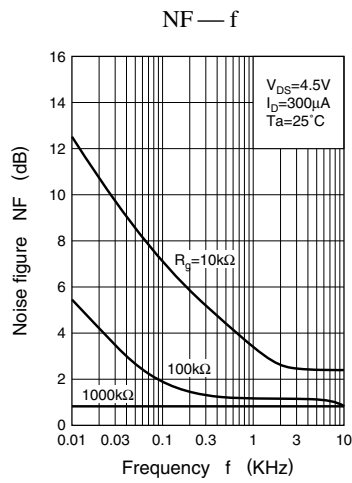
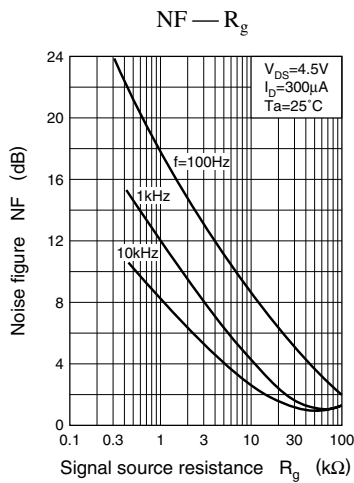
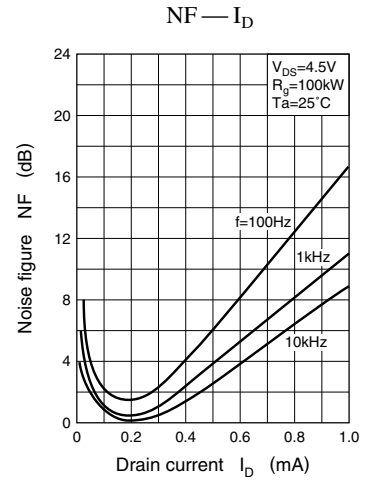
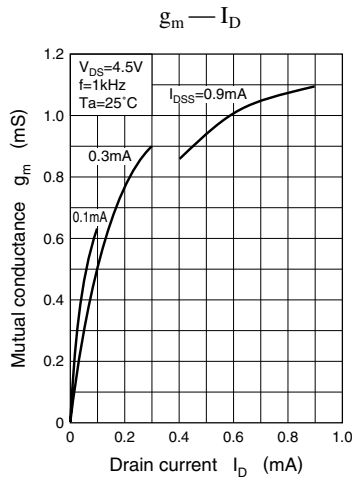
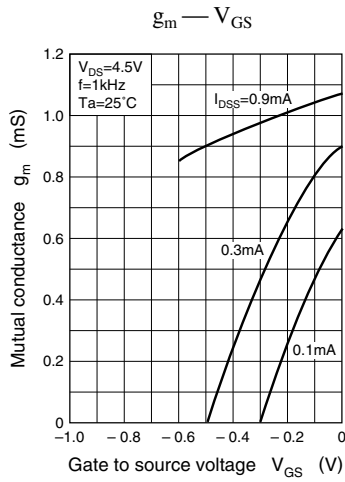
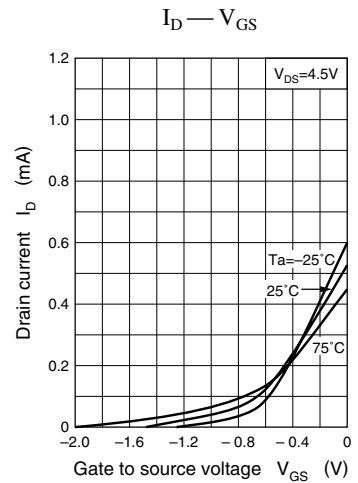
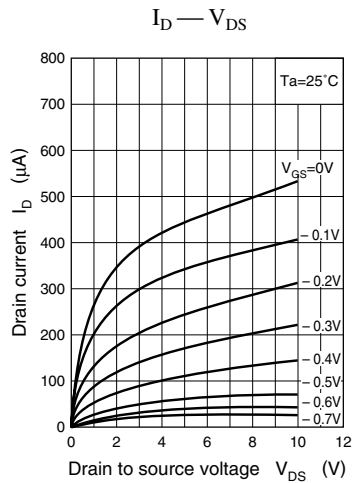
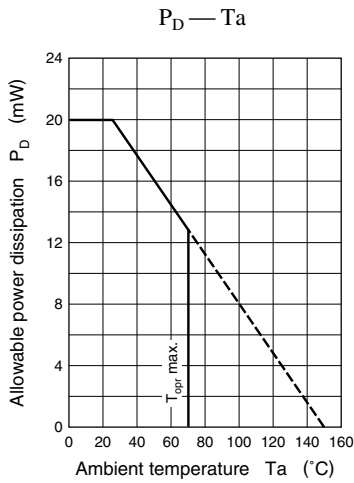
■ Electrical Characteristics (Ta = 25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Drain to Source cut-off current	I_{DSS}^*	$V_{DS} = 4.5V, V_{GS} = 0, R_S = 2.2k\Omega \pm 1\%$	0.04		0.8	mA
Mutual conductance	g_m	$V_{DS} = 4.5V, V_{GS} = 0$ $R_S = 2.2k\Omega \pm 1\%, f = 1kHz$	300	500		μS
Noise figure	NV	$V_{DS} = 4.5V, R_S = 2.2k\Omega \pm 1\%$ $C_G = 10pF, A\text{-curve}$			4	μV
Voltage gain	G_{V1}^*	$V_{DS} = 4.5V, R_S = 2.2k\Omega \pm 1\%$ $C_G = 10pF, e_G = 100mV, f = 70Hz$		-10		dB
	G_{V2}^*	$V_{DS} = 12V, R_S = 2.2k\Omega \pm 1\%$ $C_G = 10pF, e_G = 100mV, f = 70Hz$		-9.5		dB
	G_{V3}^*	$V_{DS} = 1V, R_S = 2.2k\Omega \pm 1\%$ $C_G = 10pF, e_G = 100mV, f = 70Hz$		-11		dB

* I_{DSS} rank classification and G_V value

Runk	P	Q
I_{DSS} (mA)	0.04 to 0.2	0.15 to 0.8
G_{V1} (dB)	> -13	> -12
G_{V2} (dB)	> -12	> -11
$\Delta G_{V1} - G_{V2} $ (dB)	< 3	< 3

(Note) The part number in the parenthesis shows conventional part number.



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