

SANYO	No.836G	2SK222
		N-Channel Junction Silicon FET Low-Frequency, Low-Noise Amp Applications

Features

- Ultralow noise figure.
- Large $|Y_{fs}|$.
- Low gate leakage current.

Absolute Maximum Ratings at Ta = 25°C

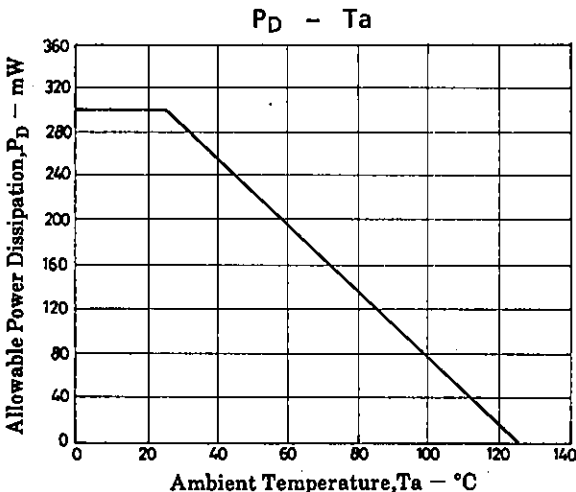
			unit
Drain-to-Source Voltage	V_{DSS}	40	V
Gate-to-Drain Voltage	V_{GDS}	-40	V
Gate Current	I_G	10	mA
Allowable Power Dissipation	P_D	300	mW
Junction Temperature	T_j	125	°C
Storage Temperature	T_{stg}	-40 to +125	°C

Electrical Characteristics at Ta = 25°C

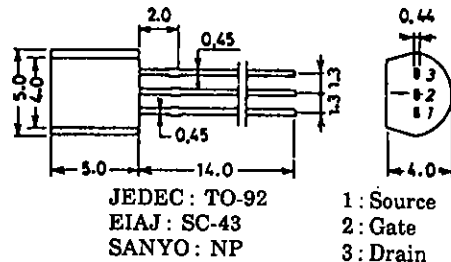
			min	typ	max	unit
G-D Breakdown Voltage	$V_{(BR)GDS}$	$I_G = -100\mu A$	-40			V
Gate Cutoff Current	I_{GSS}	$V_{GS} = -20V$			-1.0	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 10\mu A$		0.5		V
Drain Current	I_{DSS}	$V_{DS} = 10V, V_{GS} = 0$	0.6*		12.0*	mA
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = 10V, V_{GS} = 0, f = 1kHz$		17		mS
Input Capacitance	C_{iss}	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		14		pF
Reverse Transfer Capacitance	C_{ras}	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		3.5		pF
Noise Figure	NF(1)	$V_{DS} = 10V, V_{GS} = 0, R_g = 1k\Omega, f = 100Hz$		1.0	3.0	dB
	NF(2)	$V_{DS} = 10V, V_{GS} = 0, R_g = 1k\Omega, f = 1kHz$		0.6	1.5	dB
Equivalent Input Noise Voltage	V_{NI}	$V_{DS} = 10V, V_{GS} = 0, R_g = 1k\Omega, f = 1kHz$		2		nV/ \sqrt{Hz}

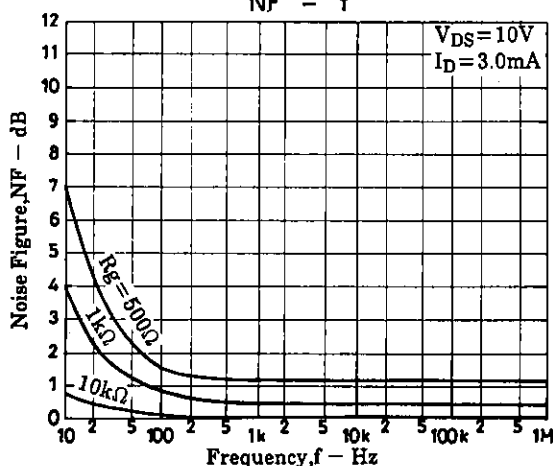
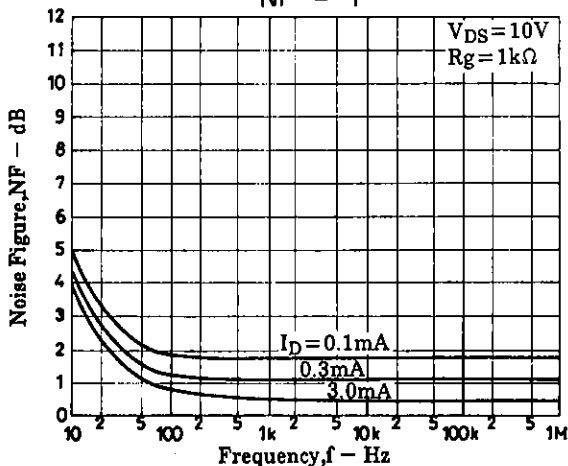
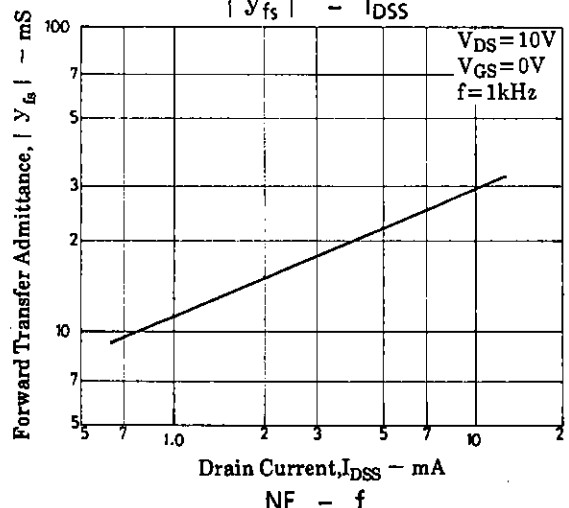
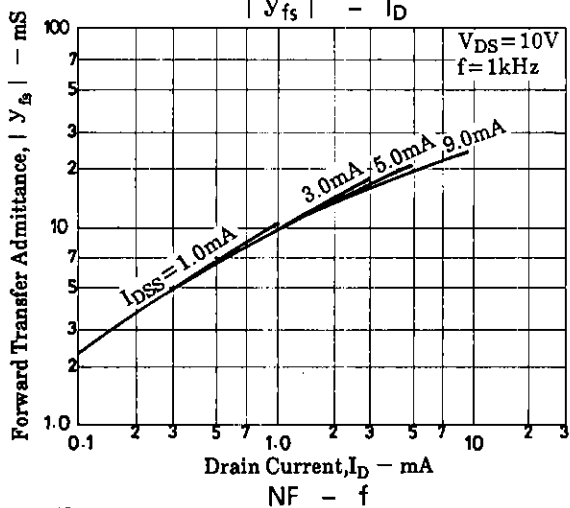
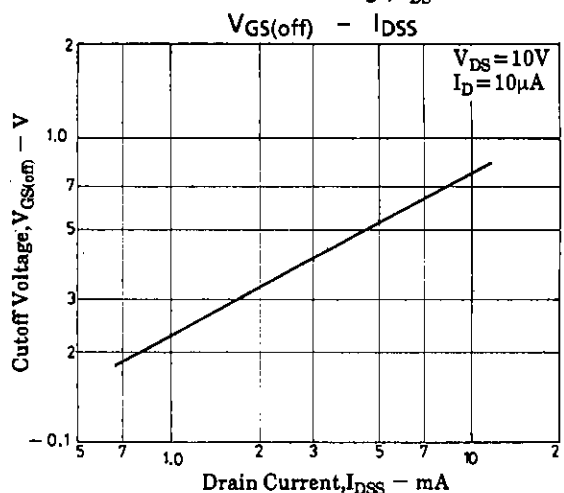
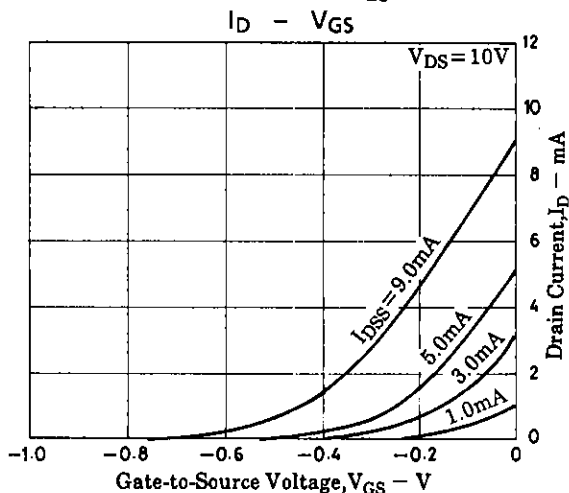
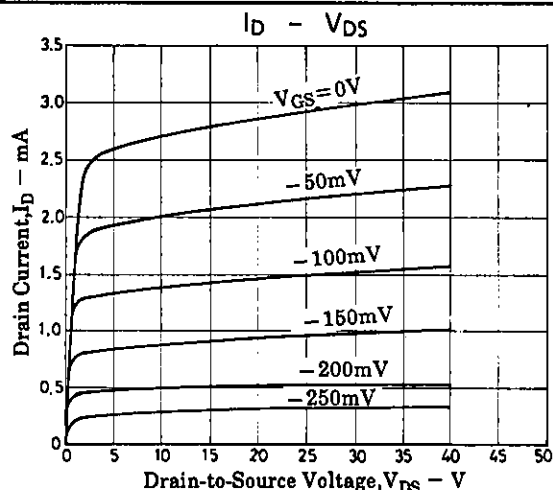
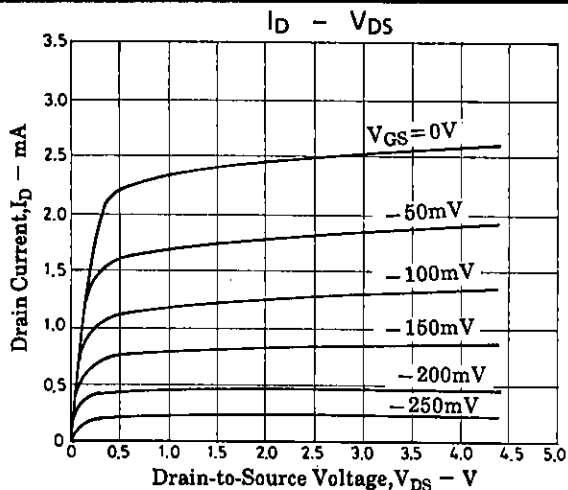
* : The 2SK222 is classified by I_{DSS} as follows : (unit : mA)

0.6 C 1.5	1.2 D 3.0	2.5 E 6.0	5.0 F 12.0
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Package Dimensions 2019B
(unit : mm)





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