

<b>SANYO</b>	No.836G	<b>2SK222</b>
		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**

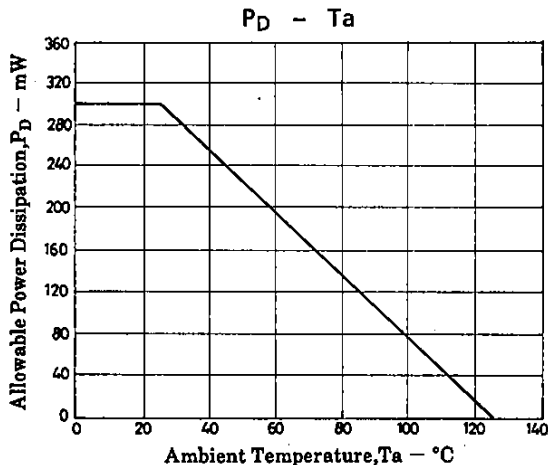
			unit
Drain-to-Source Voltage	$V_{DS}$	40	V
Gate-to-Drain Voltage	$V_{GDS}$	-40	V
Gate Current	$I_G$	10	mA
Allowable Power Dissipation	$P_D$	300	mW
Junction Temperature	$T_j$	125	°C
Storage Temperature	$T_{stg}$	-40 to +125	°C

**Electrical Characteristics at Ta = 25°C**

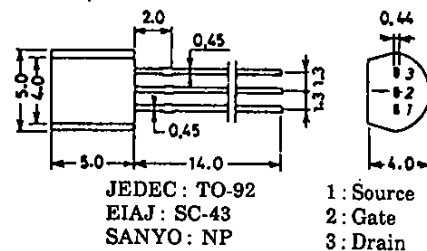
			min	typ	max	unit
G-D Breakdown Voltage	$V_{(BR)GDS}$	$I_G = -100\mu A$	-40			V
Gate Cutoff Current	$I_{GSS}$	$V_{GS} = -20V$			-1.0	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 10\mu A$		0.5		V
Drain Current	$I_{DSS}$	$V_{DS} = 10V, V_{GS} = 0$	0.6*		12.0*	mA
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS} = 10V, V_{GS} = 0, f = 1kHz$		17		mS
Input Capacitance	$C_{iss}$	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		14		pF
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		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
Equivqlent 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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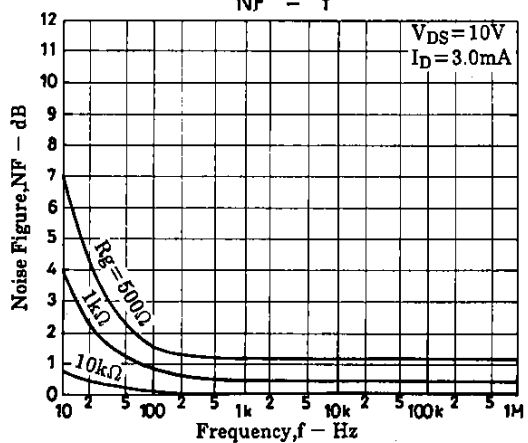
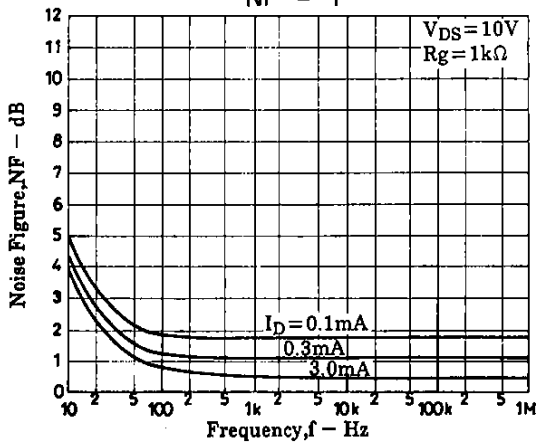
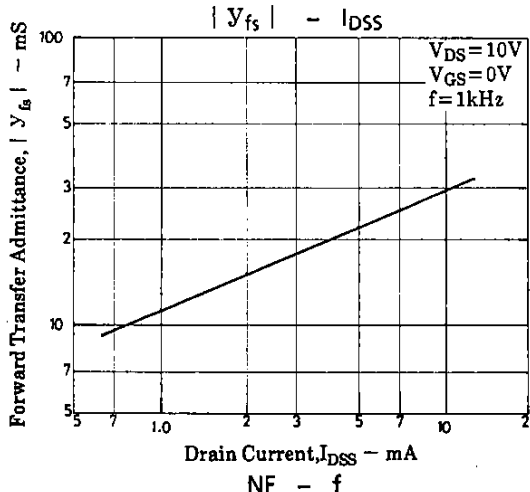
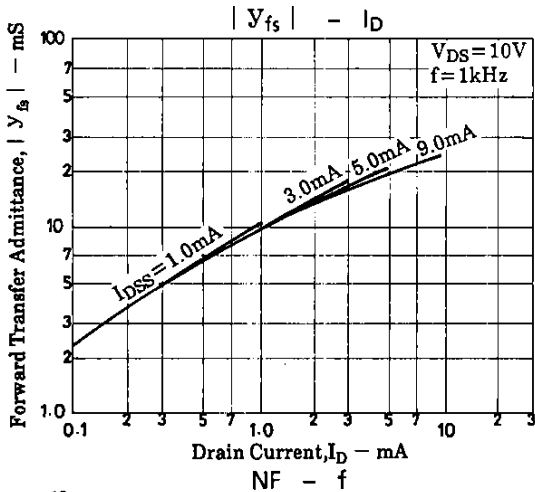
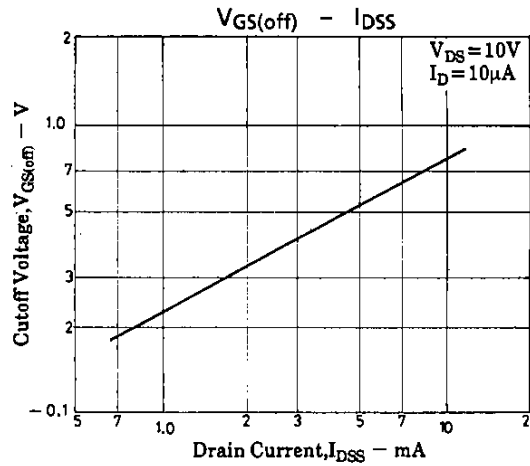
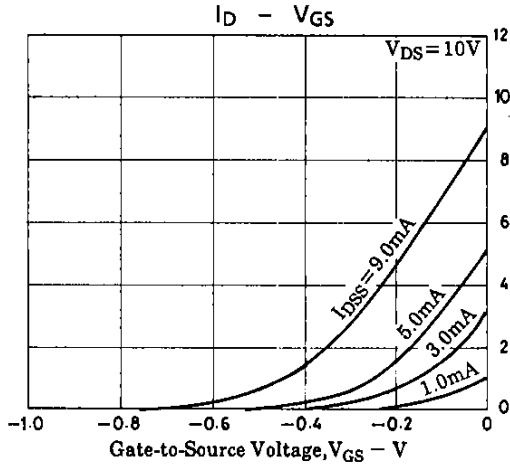
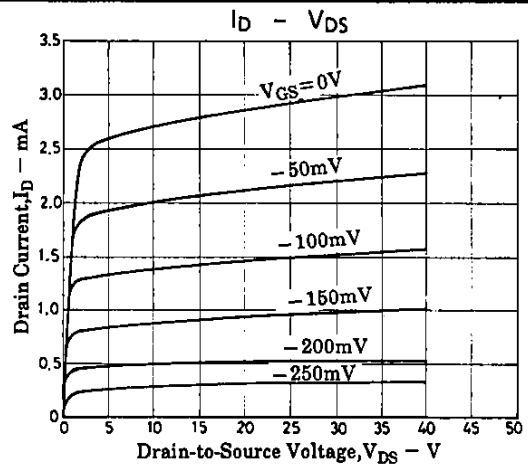
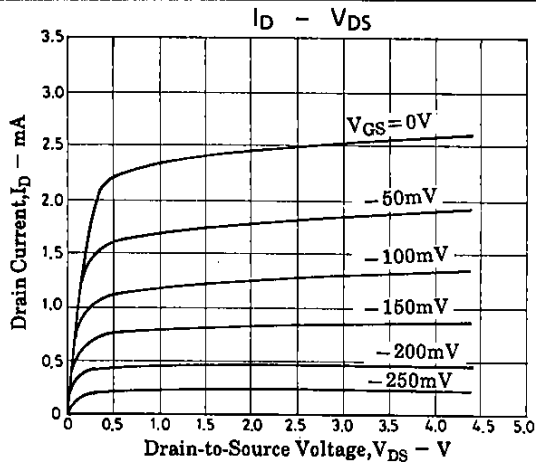


**Package Dimensions 2019B**  
(unit : mm)



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