

**2SK436**

## High-Frequency, Low-Frequency General-Purpose Amplifier Applications

### Applications

- AM tuner RF amplifiers and low-noise amplifiers.

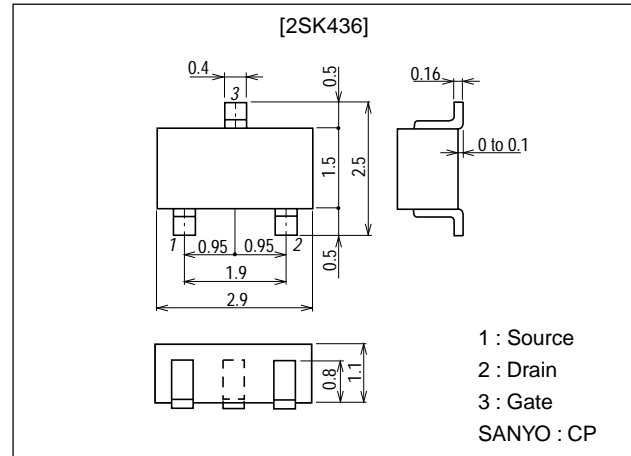
### Features

- Large  $|y_{fs}|$ .
- Ultralow noise figure.
- Small Crss.
- Ultrasmall-sized package permitting 2SK436-applied sets to be made small and slim.

### Package Dimensions

unit:mm

2050A



### Specifications

#### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	$V_{DSS}$		15	V
Gate-to-Drain Voltage	$V_{GDS}$		-15	V
Gate Current	$I_G$		10	mA
Drain Current	$I_D$		20	mA
Allowable Power Dissipation	$P_D$		150	mW
Junction Temperature	$T_J$		125	°C
Storage Temperature	$T_{stg}$		-55 to +125	°C

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	$V_{(BR)GDS}$	$I_G = -10\mu A, V_{DS} = 0$	-15			V
Gate-to-Source Leakage Current	$I_{GSS}$	$V_{GS} = -10V, V_{DS} = 0$			-1.0	nA
Zero-Gate Voltage Drain Current	$I_{DSS}^*$	$V_{DS} = 5V, V_{GS} = 0$	1.2*		12.0*	mA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 5V, I_D = 100\mu A$		-0.5	-1.5	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = 5V, V_{GS} = 0, f = 1kHz$	8.0	17		mS
Input Capacitance	Ciss	$V_{DS} = 5V, V_{GS} = 0, f = 1MHz$		7.0		pF
Reverse Transfer Capacitance	Crss	$V_{DS} = 5V, V_{GS} = 0, f = 1MHz$		2.0		pF
Noise Figure	NF	$V_{DS} = 5V, I_D = 1mA, R_g = 1k\Omega, f = 1kHz$		1.5		dB

\* : The 2SK436 is classified by  $I_{DSS}$  as follows : (unit : mA)

Note) Marking : A

 $I_{DSS}$  rank : 17, 18, 19, 20, 21, 22

1.2	17	2.1	1.7	18	3.0	2.5	19	4.2
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3.5	20	6.0	5.0	21	8.5	7.3	22	12.0
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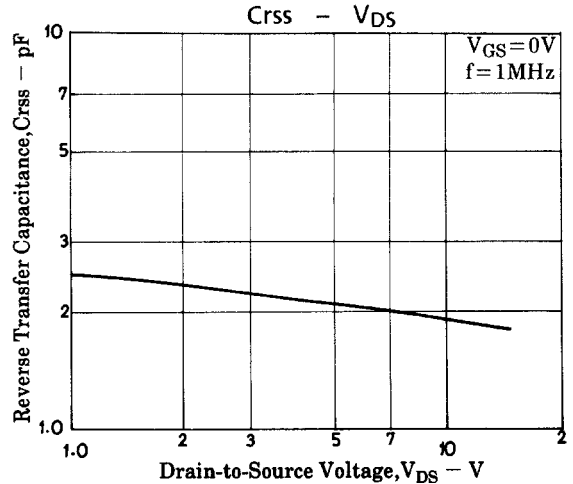
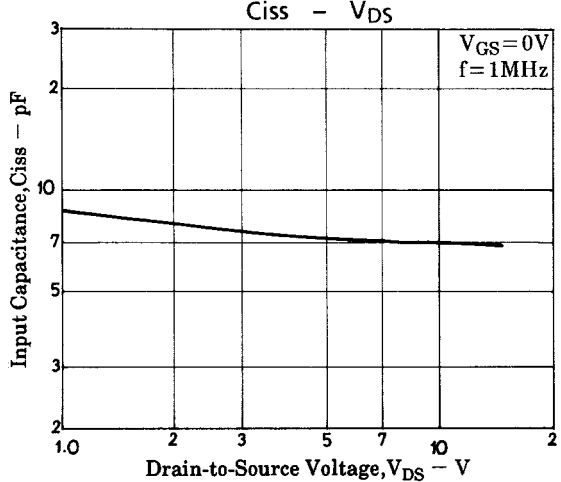
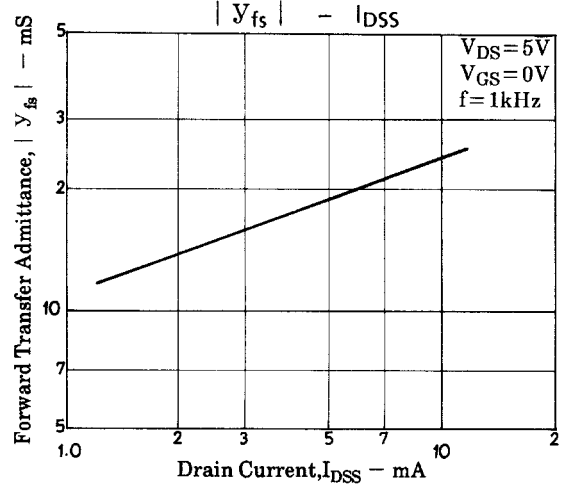
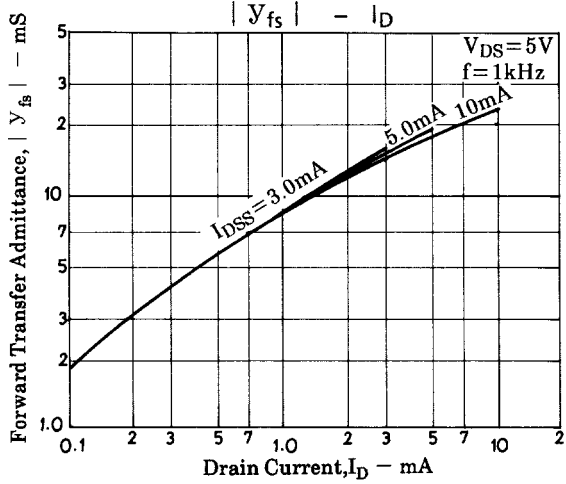
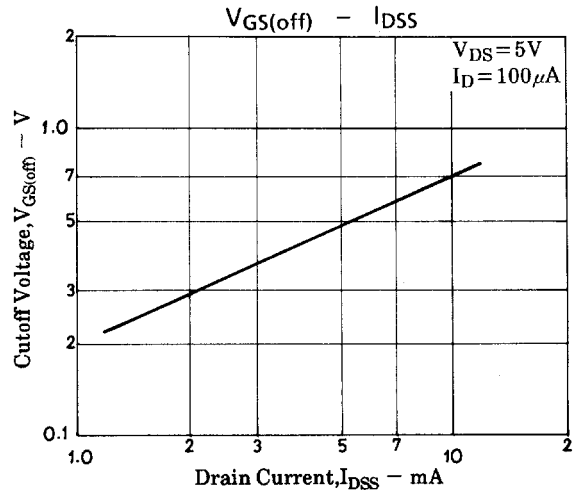
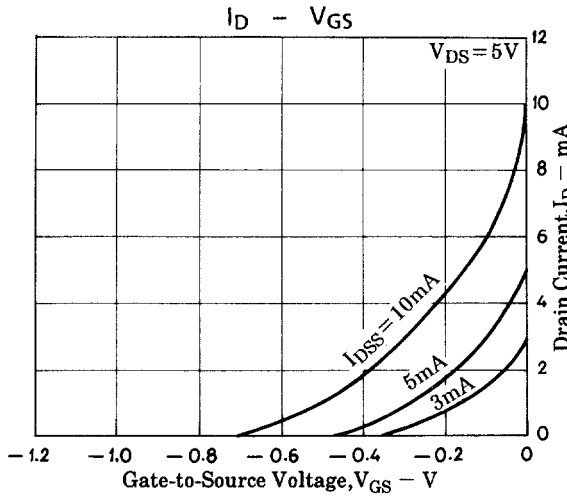
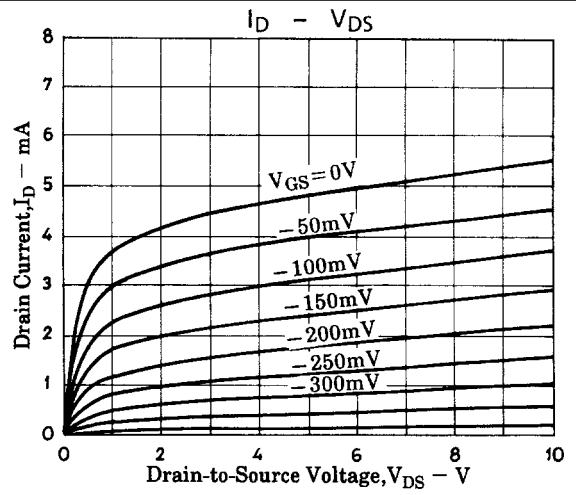
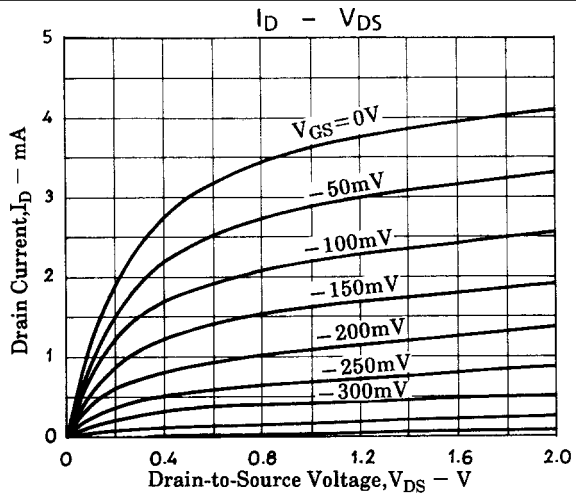
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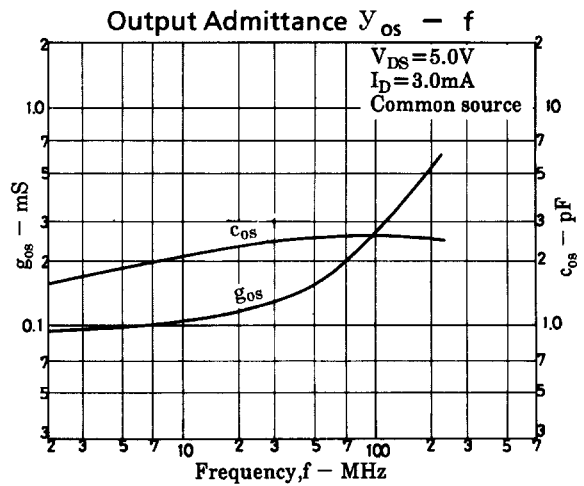
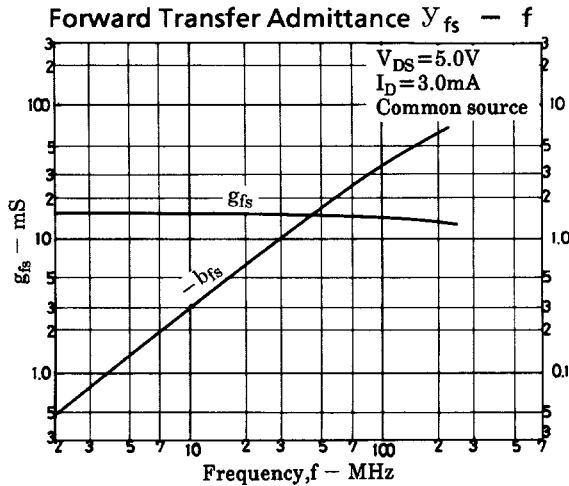
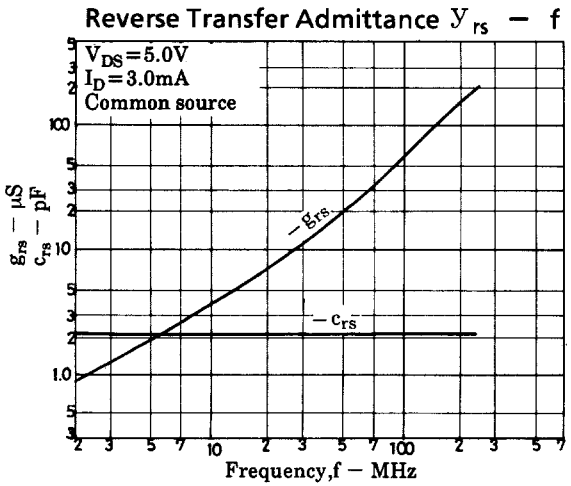
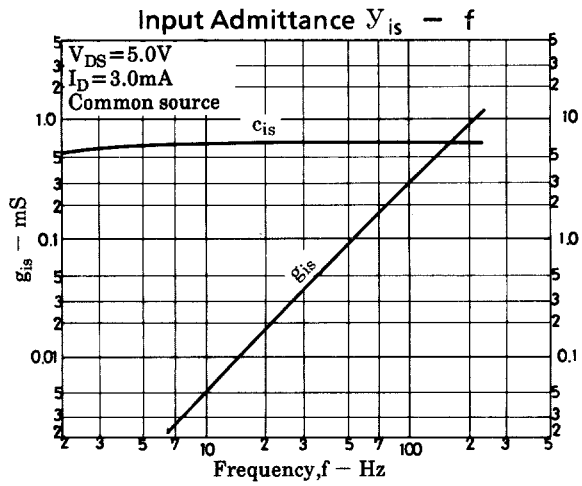
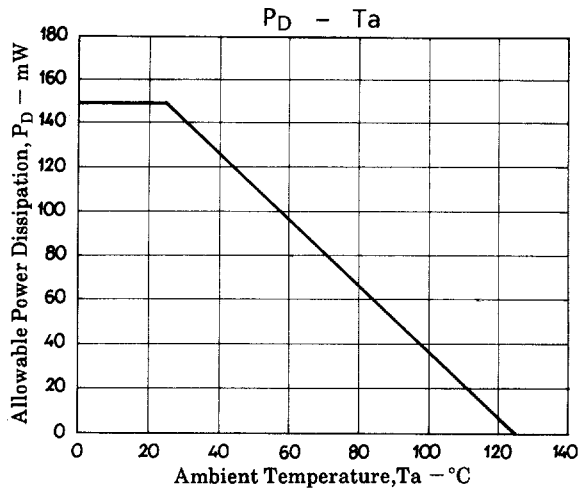
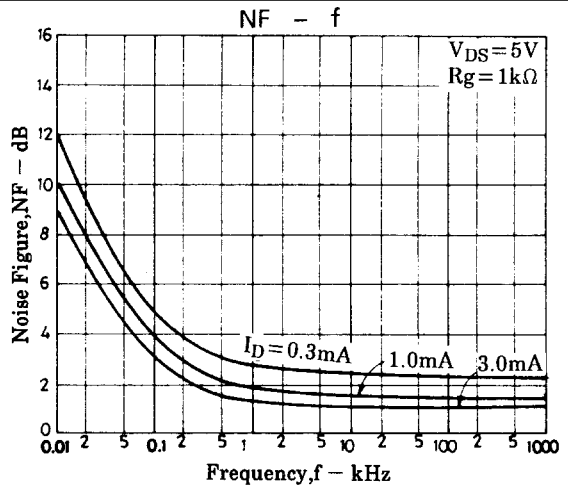
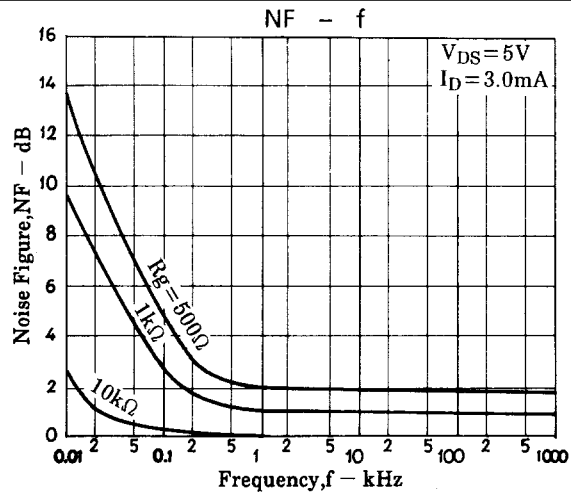
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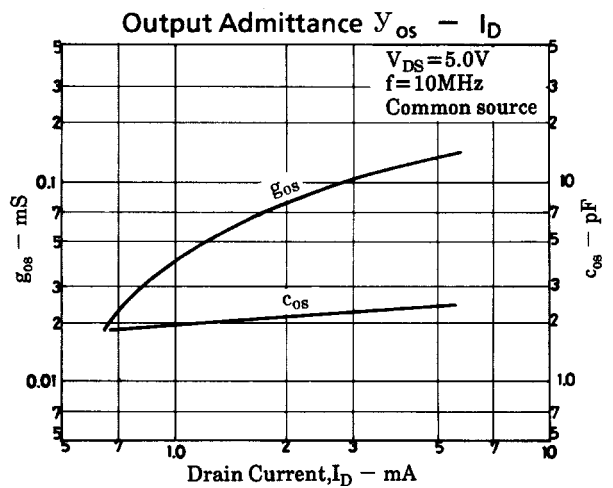
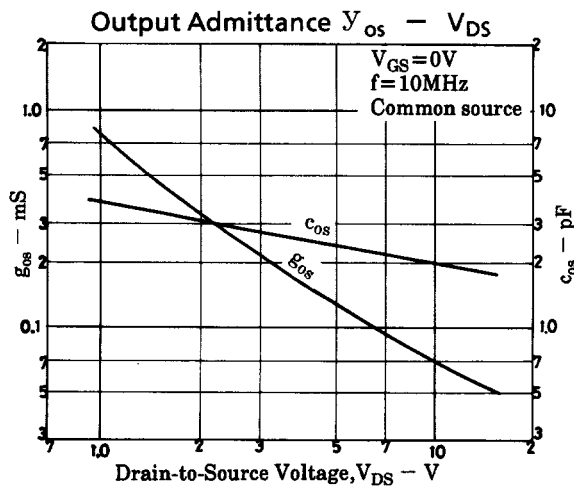
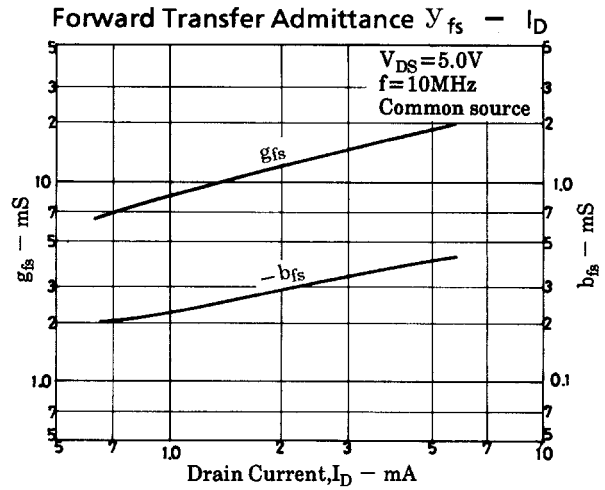
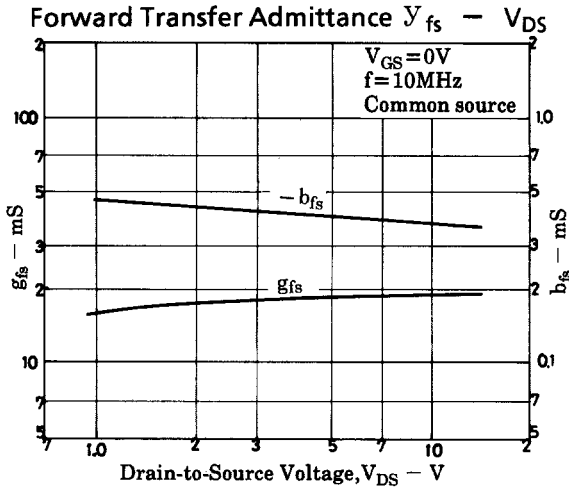
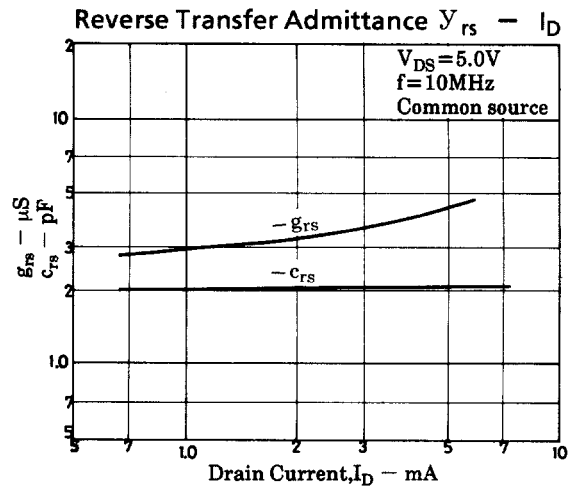
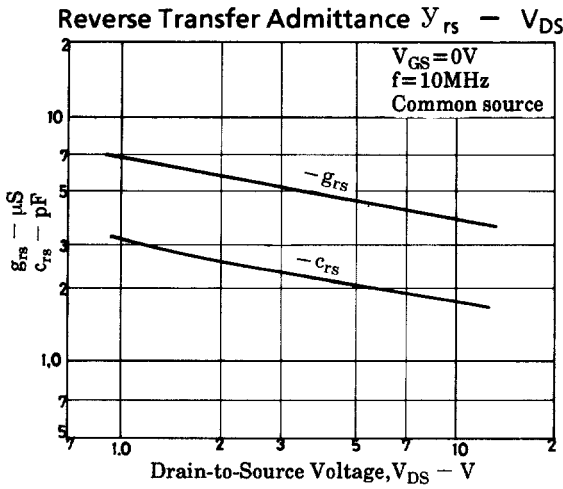
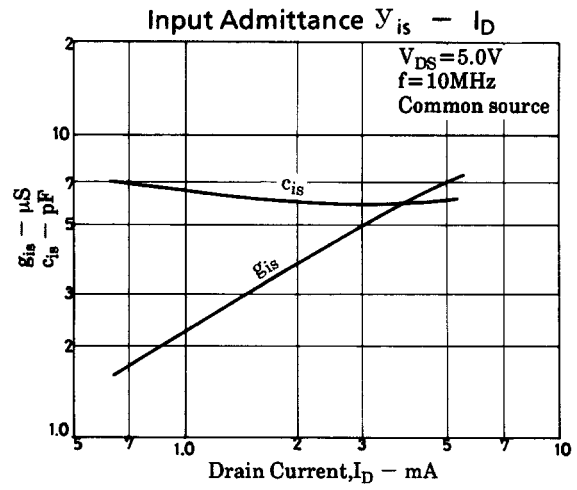
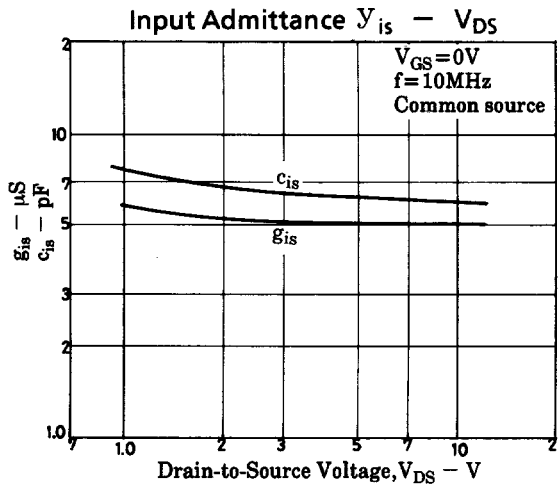
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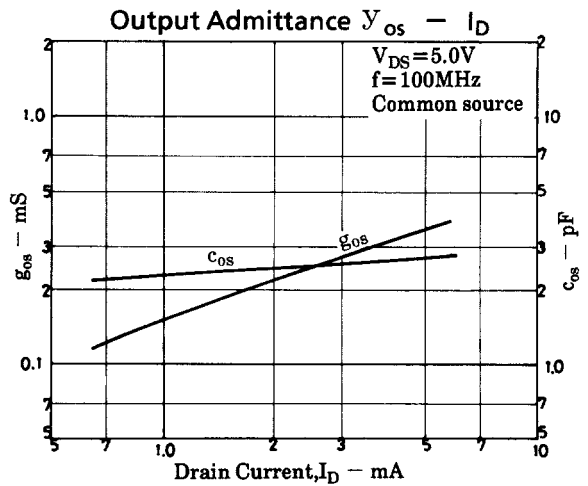
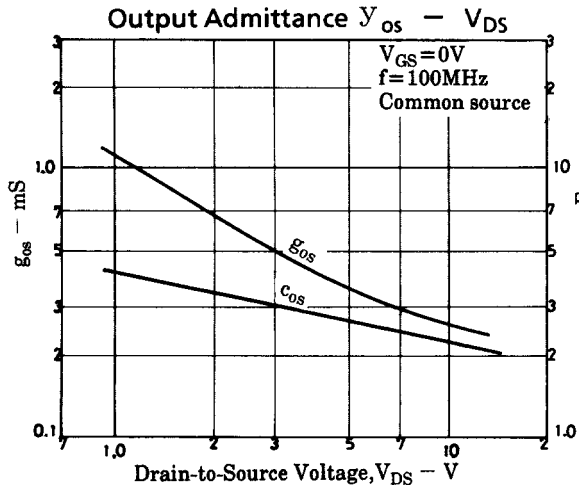
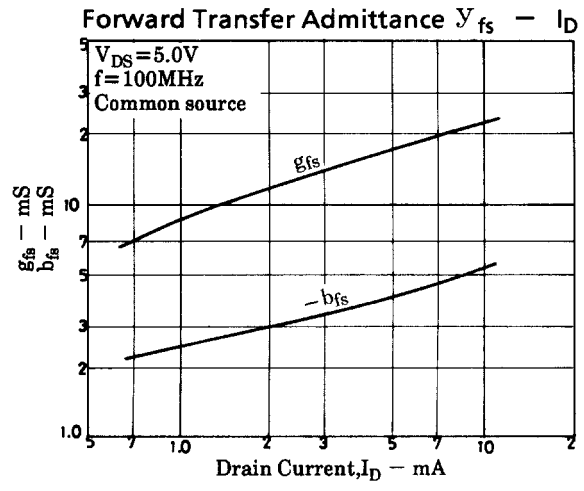
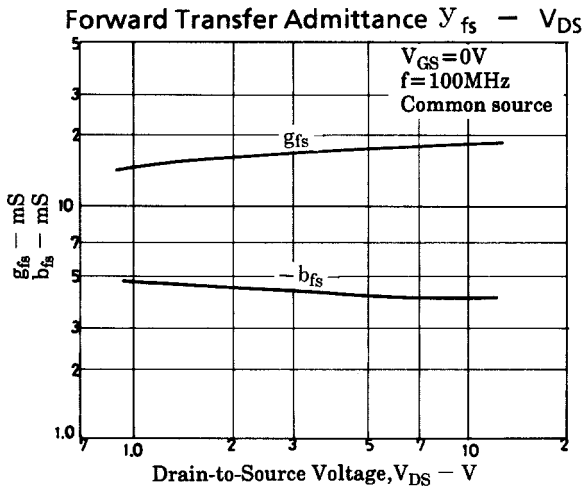
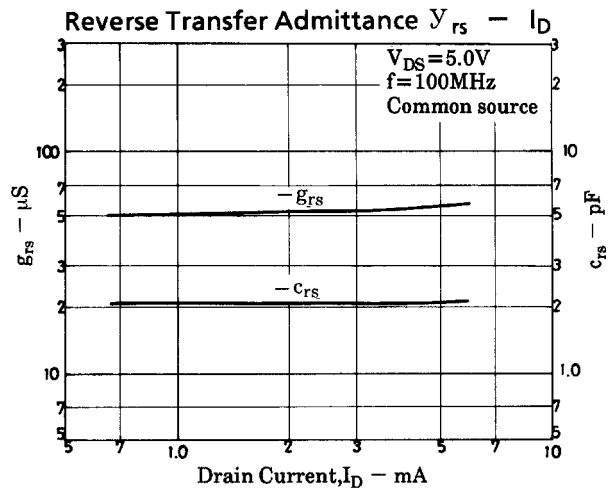
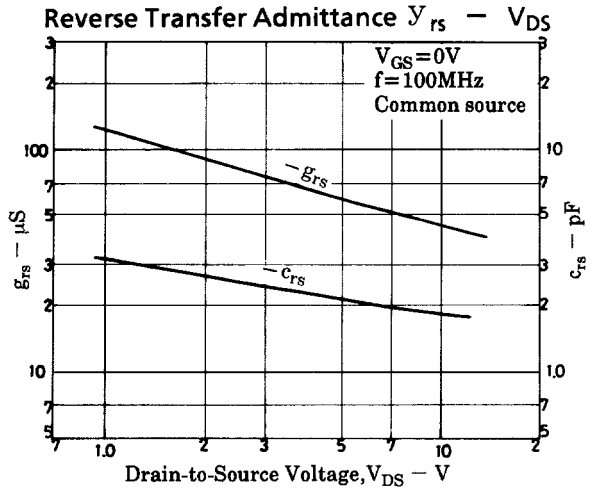
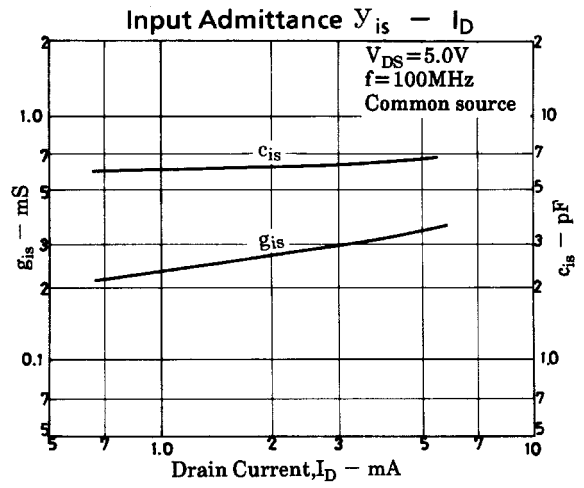
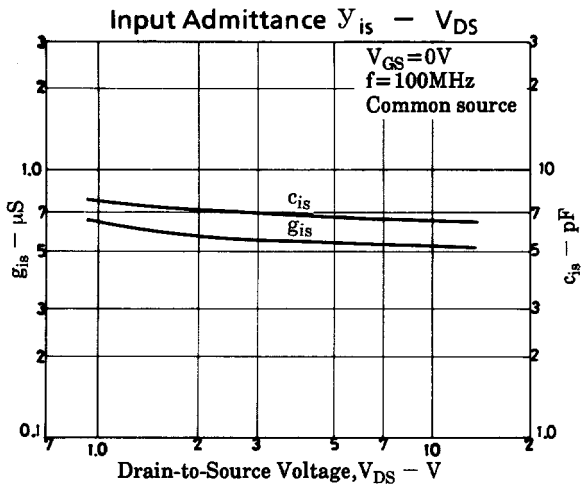
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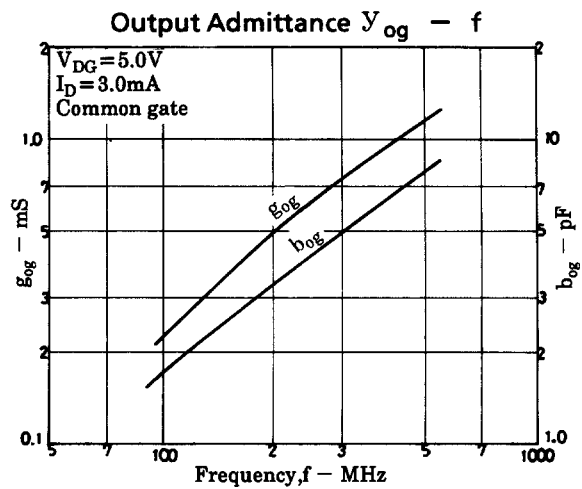
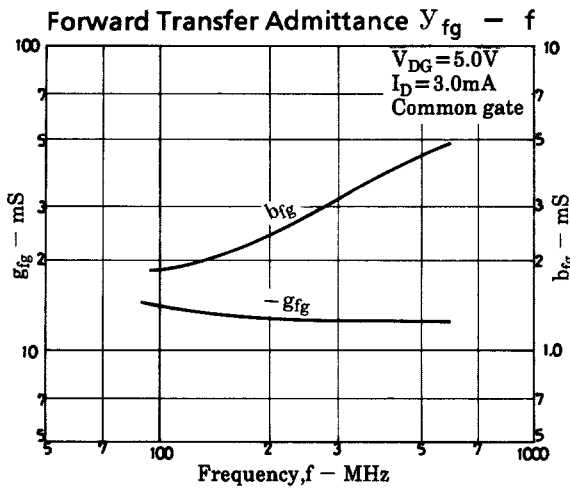
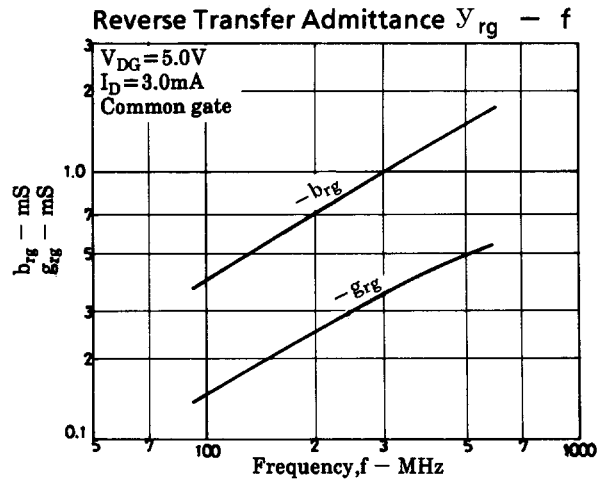
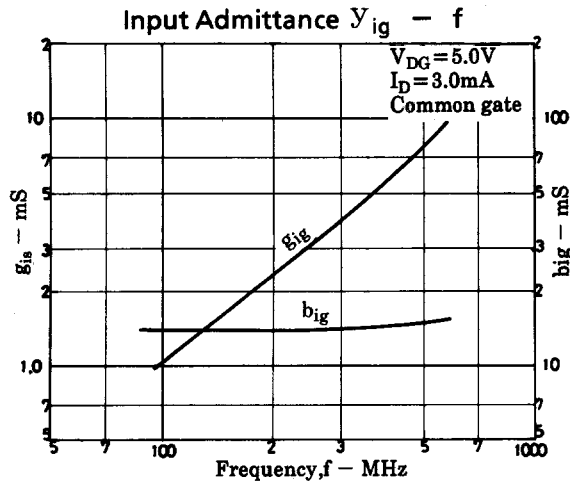


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