

**2SK1066**

## High-Frequency General-Purpose Amplifier Applications

### Applications

- High-frequency general-purpose amplifier.
- AM tuner RF amplifier.
- Low-noise amplifier.

### Features

- Large  $|y_{fs}|$ .
- Small Crss.
- Ultralow noise figure.
- Ultrasmall-sized package permitting 2SK1066-applied sets to be made smaller and slimmer.

### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	$V_{DSX}$		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	$T_J$		150	°C
Storage Temperature	$T_{stg}$		-55 to +150	°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	$I_{DSS}$	$V_{DS} = 5V, V_{GS} = 0$	3.5*		12.0*	mA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 5V, I_D = 100\mu A$	-0.2	-0.5	-1.5	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = 5V, V_{GS} = 0, f = 1kHz$	10	17		mS

\* : The 2SK1066 is classified by  $I_{DSS}$  as follows (unit : mA) :

3.5	20	6.0	5.0	21	8.5	7.3	22	12.0
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(Note) Marking : A

$I_{DSS}$  rank : 20, 21, 22

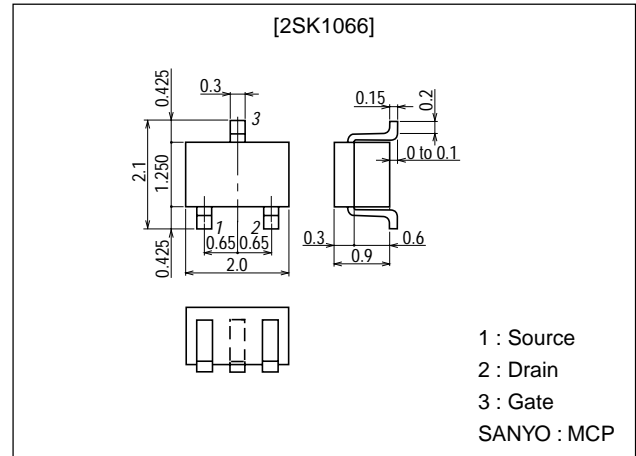
• For CP package version, use the 2SK436.

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### Package Dimensions

unit:mm

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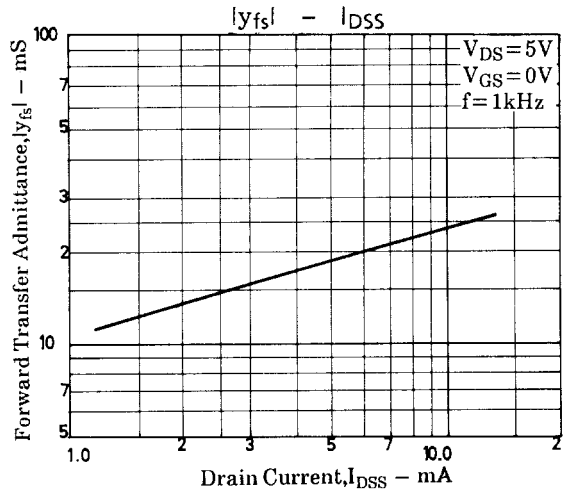
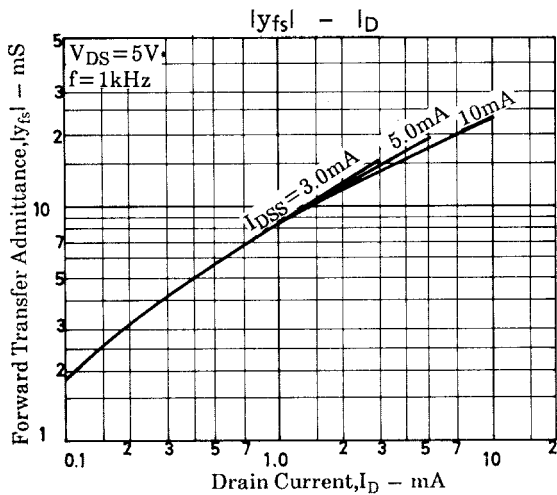
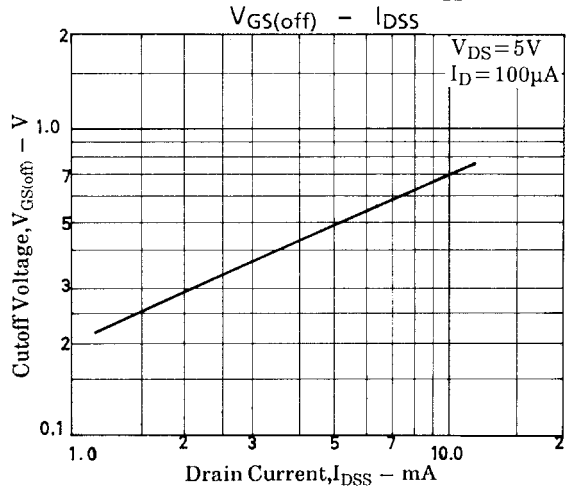
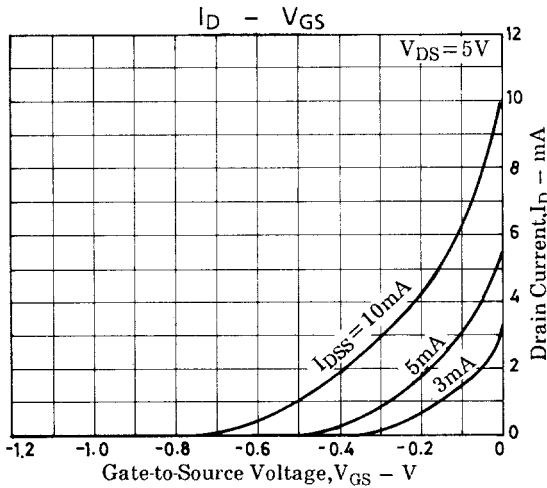
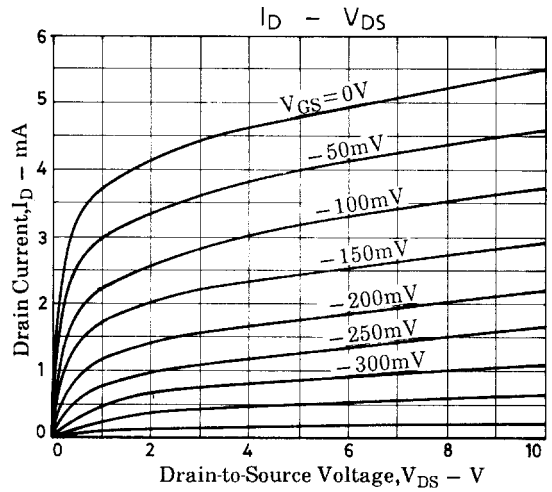
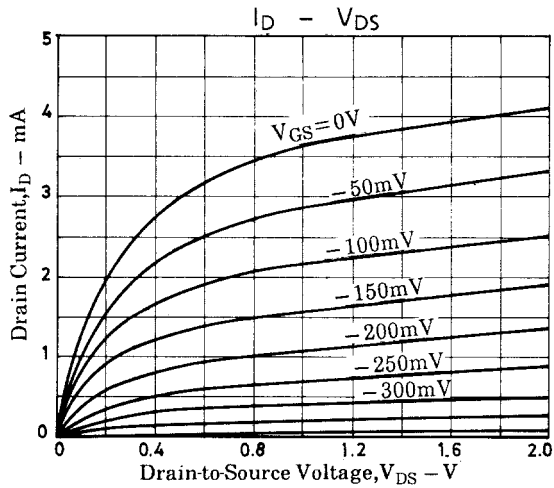
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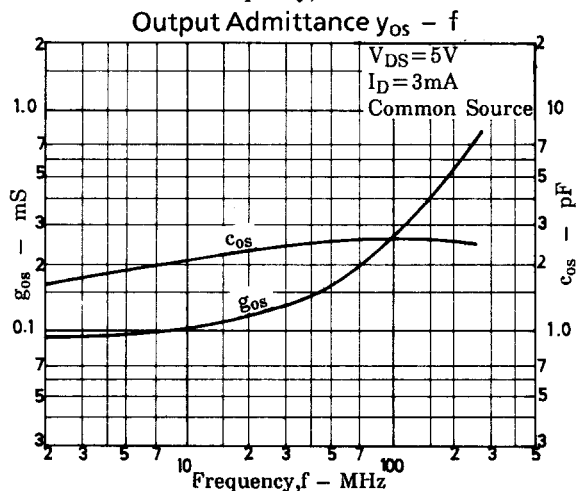
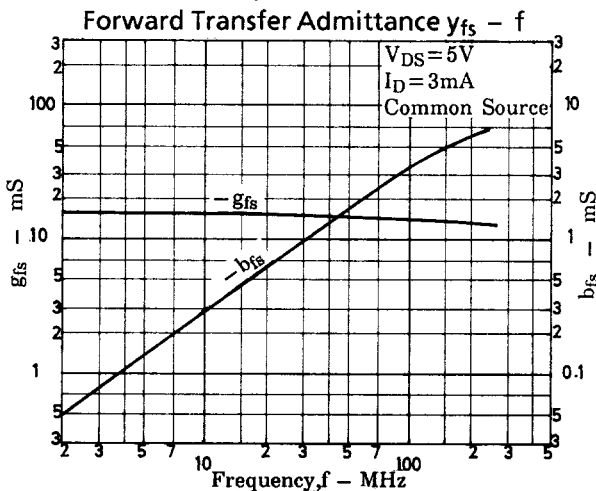
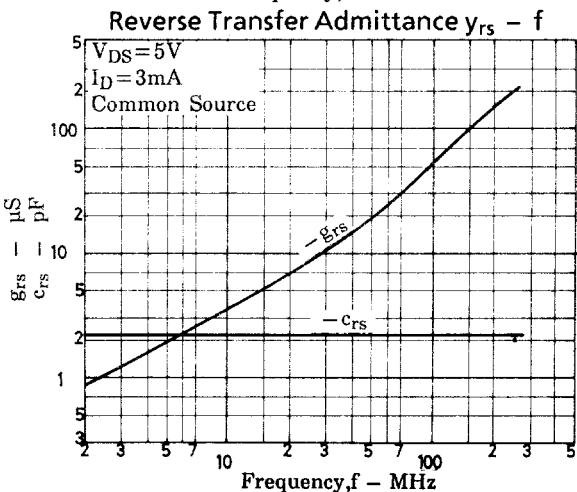
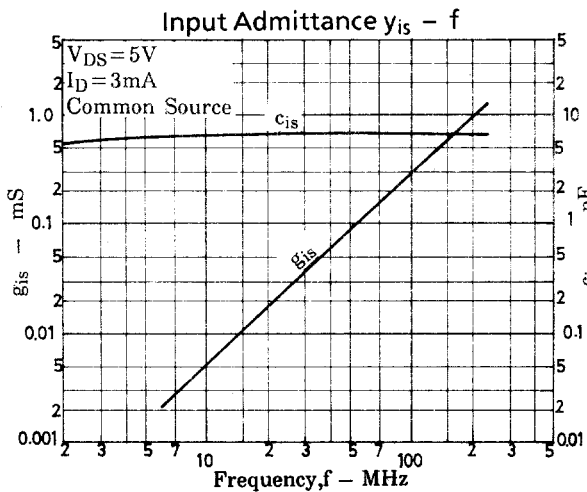
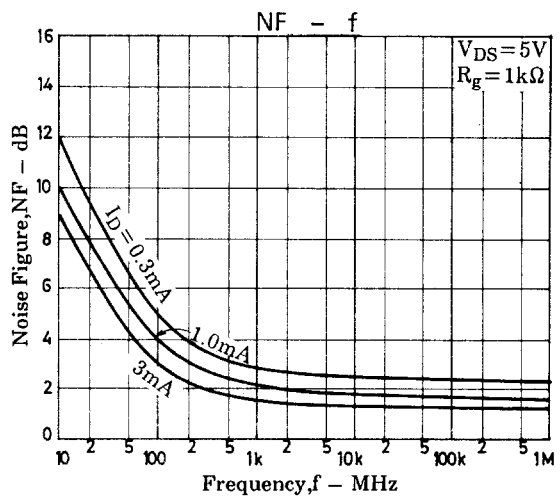
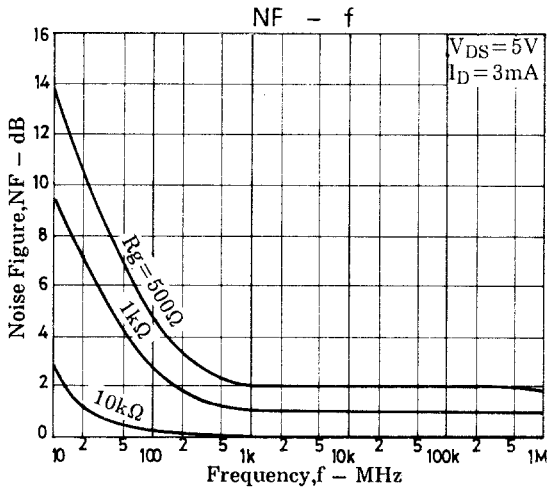
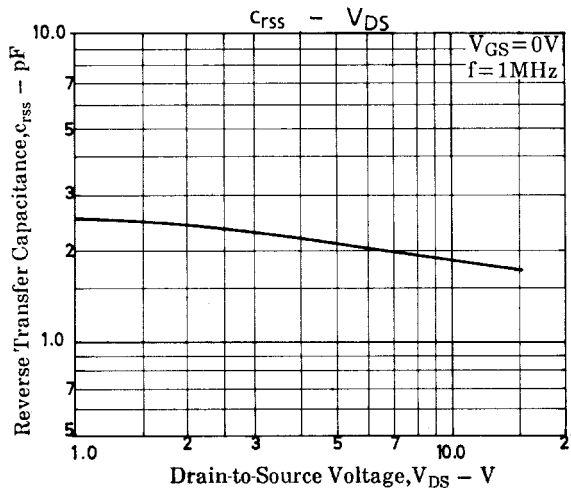
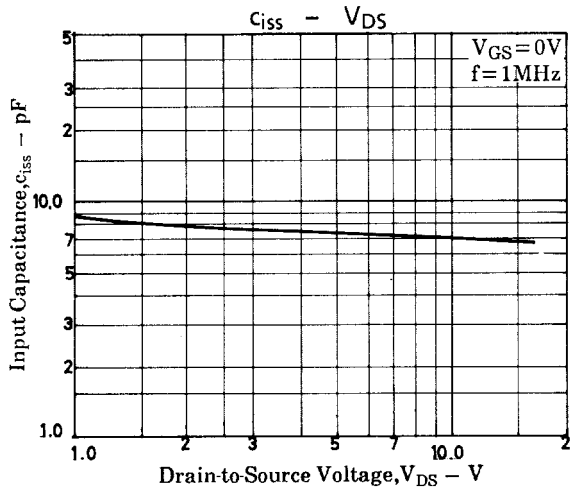
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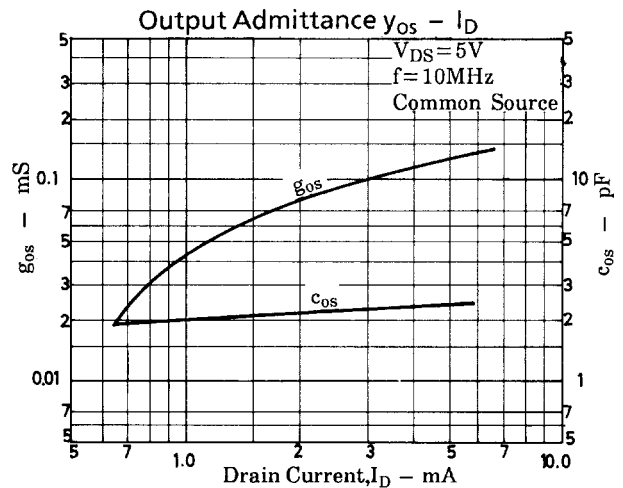
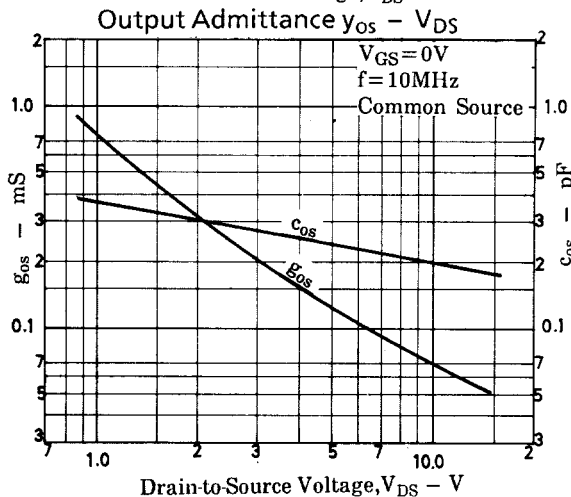
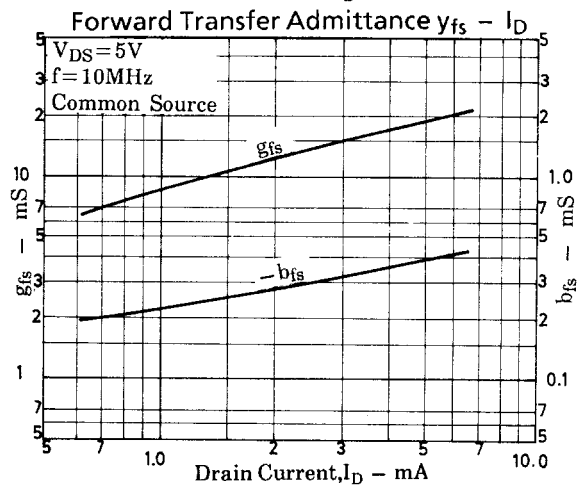
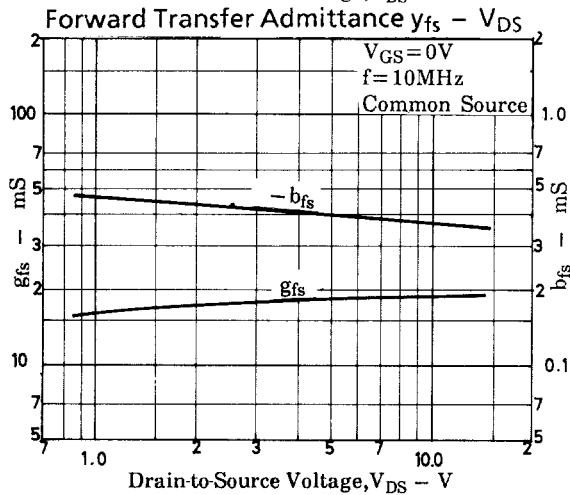
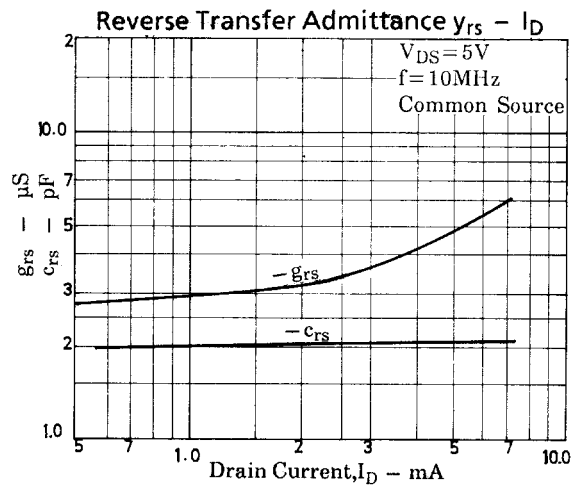
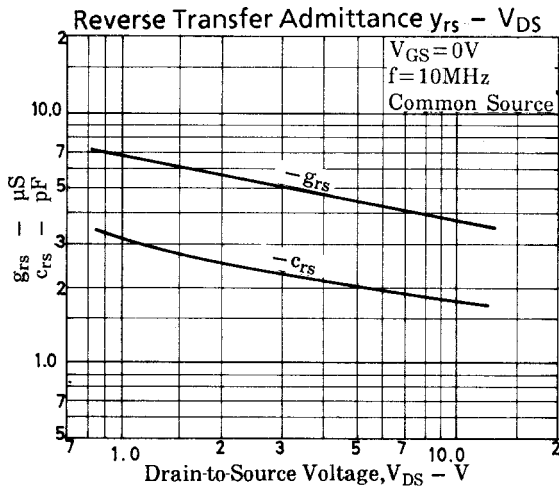
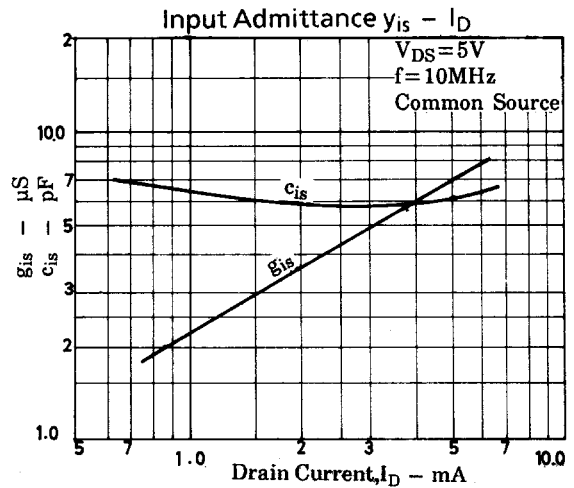
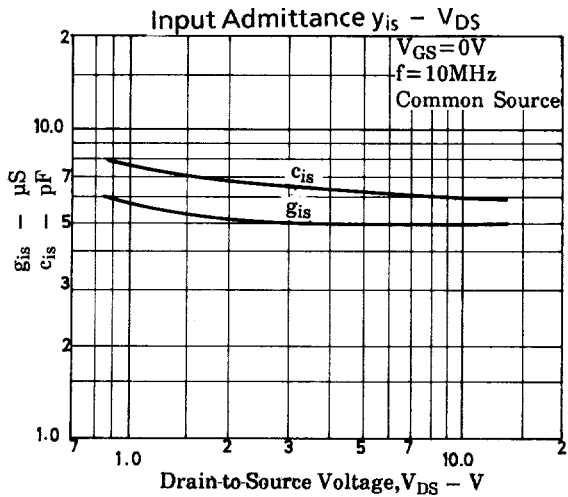
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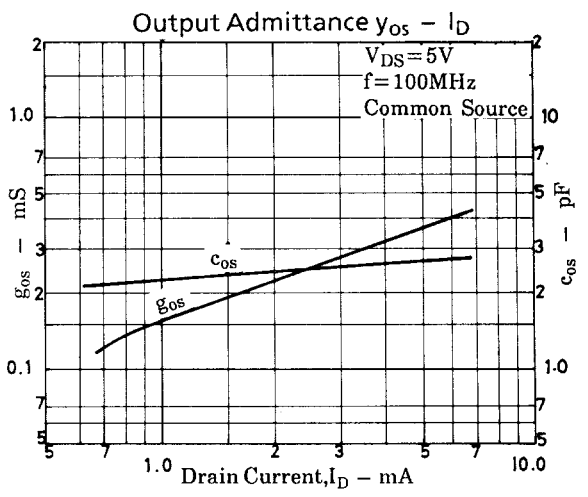
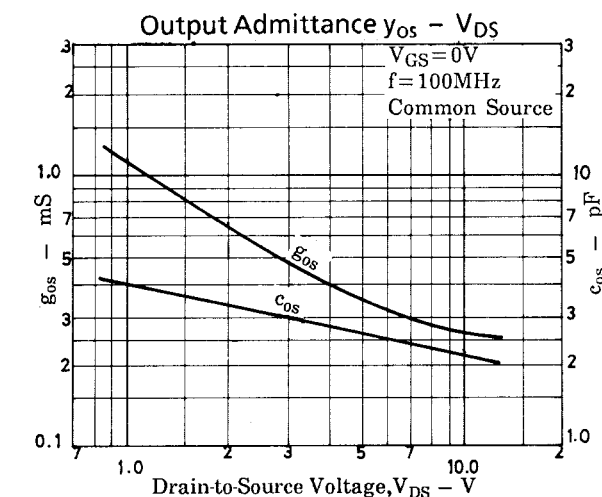
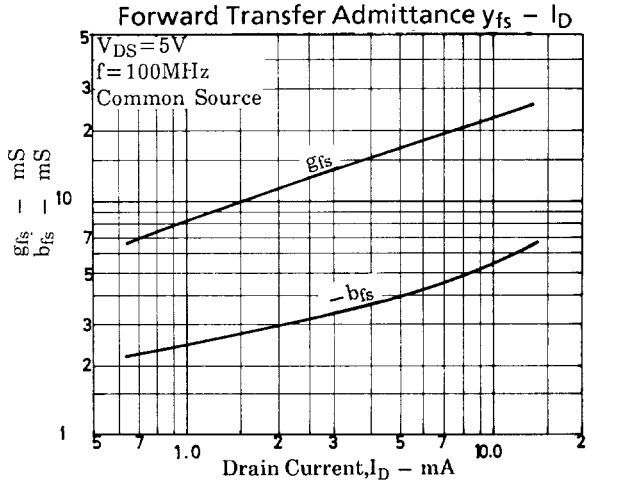
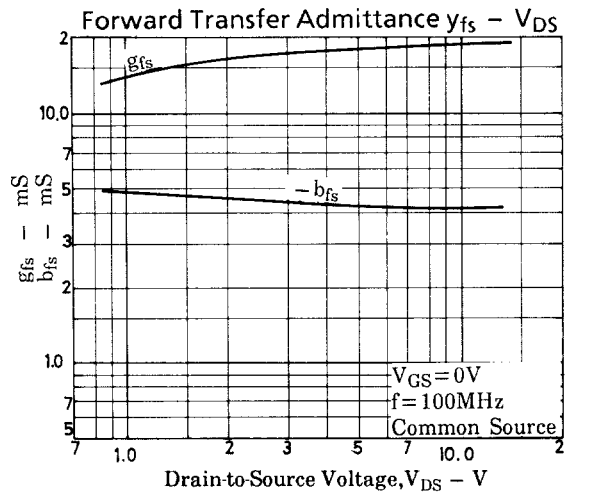
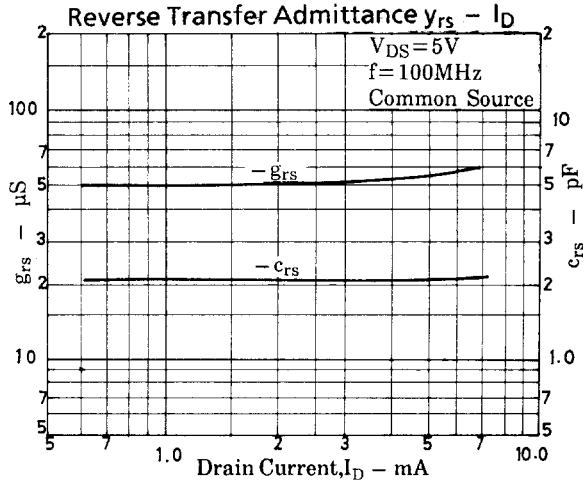
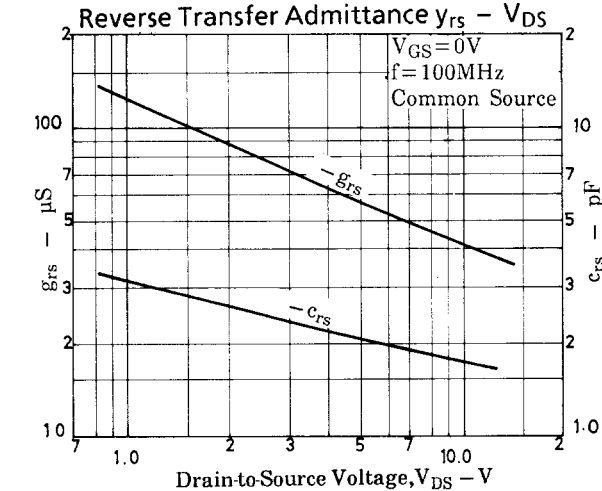
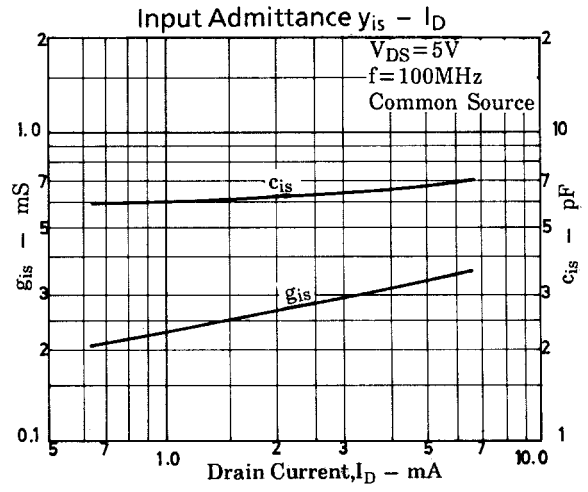
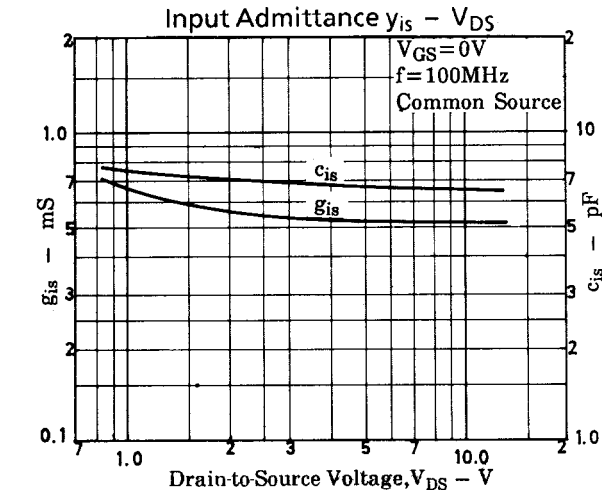
Parameter	Symbol	Conditions	Ratings	Unit
Input Capacitance	$C_{iss}$	$V_{DS}=5V, V_{GS}=0, f=1MHz$	7.0	pF
Reverse Transfer Capacitance	$C_{rss}$	$V_{DS}=5V, V_{GS}=0, f=1MHz$	2.0	pF
Noise Figure	NF	$V_{DS}=5V, R_g=1k\Omega, I_D=1mA, f=1kHz$	1.5	dB



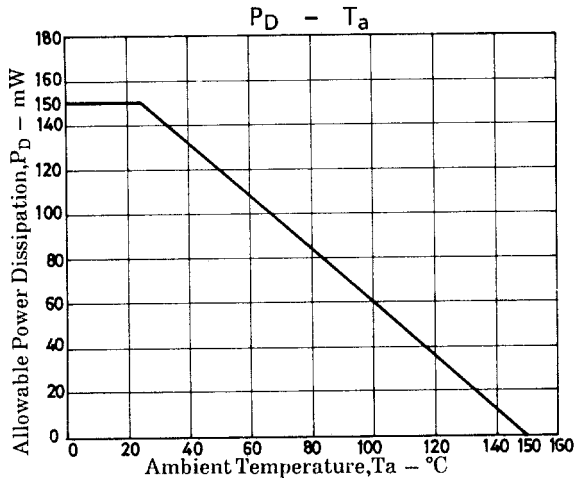
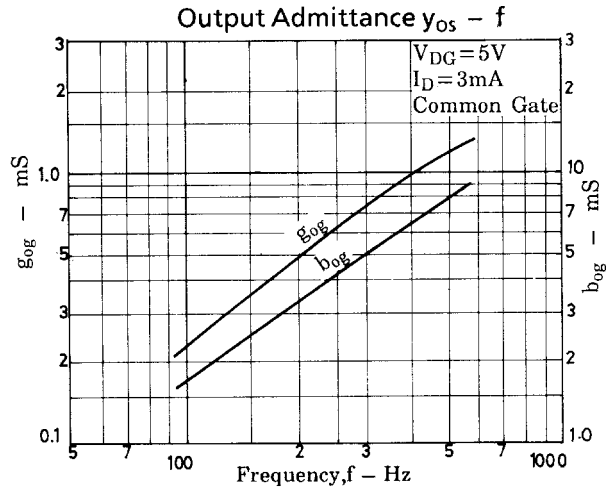
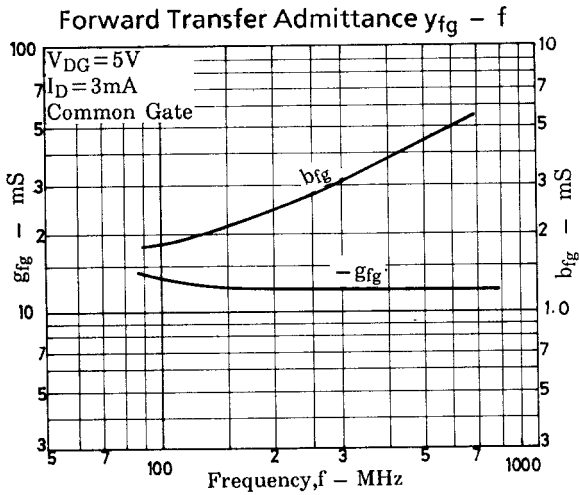
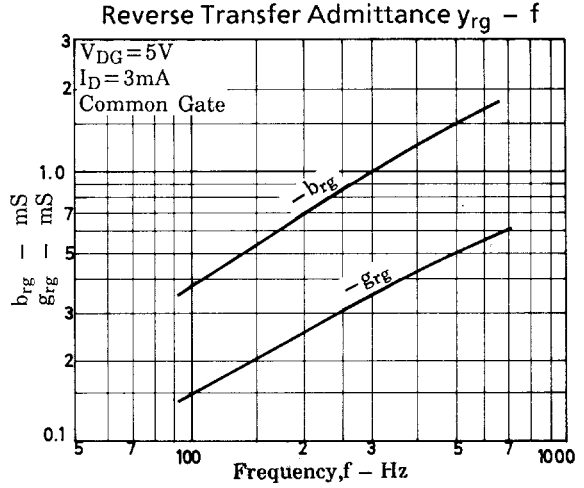
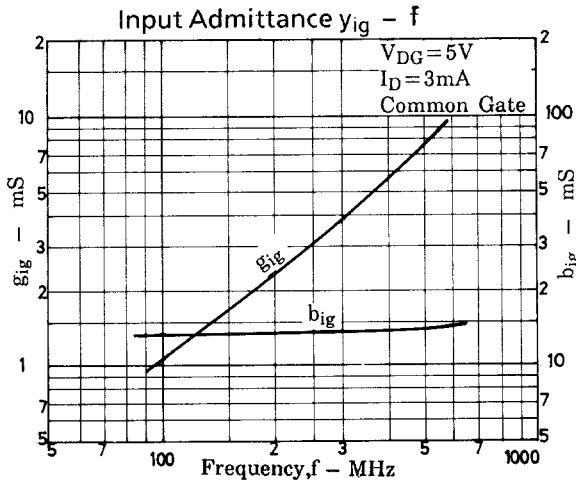
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