

**2SK1066**

High-Frequency General-Purpose Amplifier Applications

Applications

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

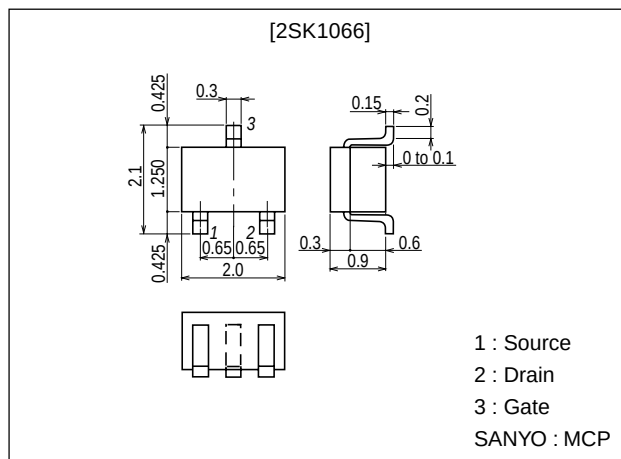
Features

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

Package Dimensions

unit:mm

2058



Specifications

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

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	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	$V_{(BR)GDS}$	$I_G = -10\mu\text{A}$, $V_{DS} = 0$	-15			V
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = -10\text{V}$, $V_{DS} = 0$			-1.0	nA
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 5\text{V}$, $V_{GS} = 0$	3.5*		12.0*	mA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 5\text{V}$, $I_D = 100\mu\text{A}$	-0.2	-0.5	-1.5	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = 5\text{V}$, $V_{GS} = 0$, $f = 1\text{kHz}$	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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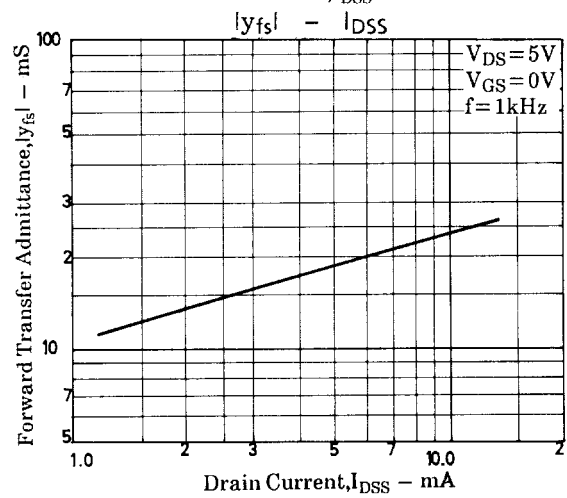
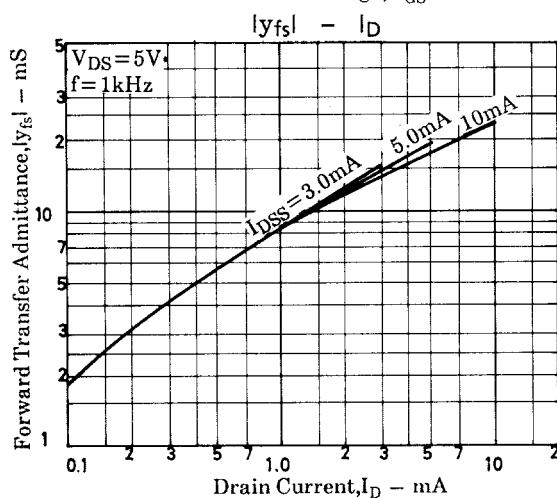
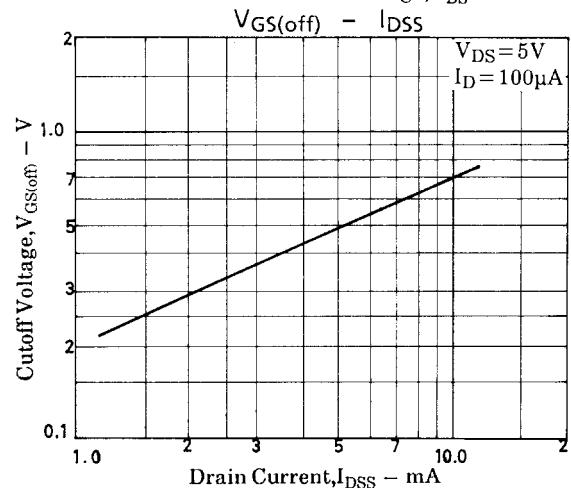
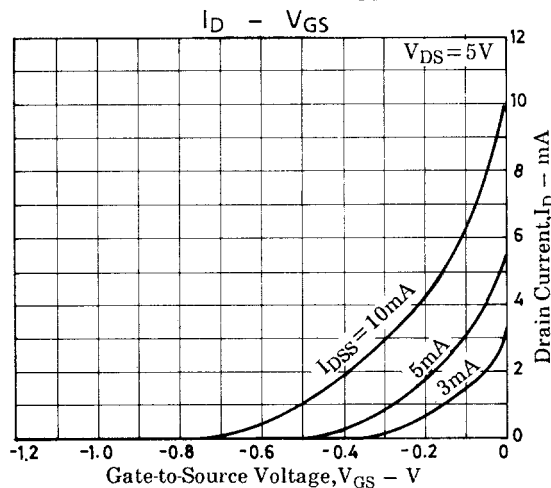
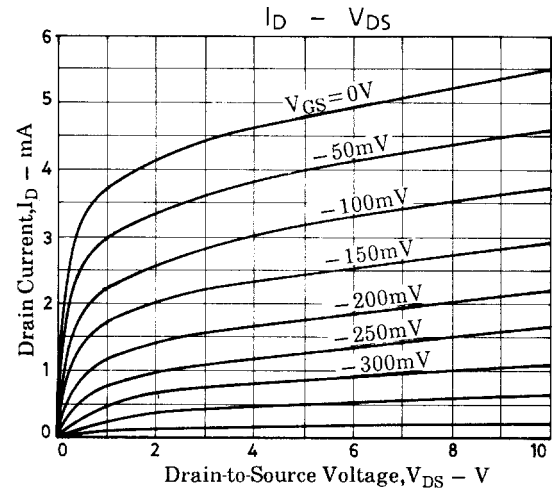
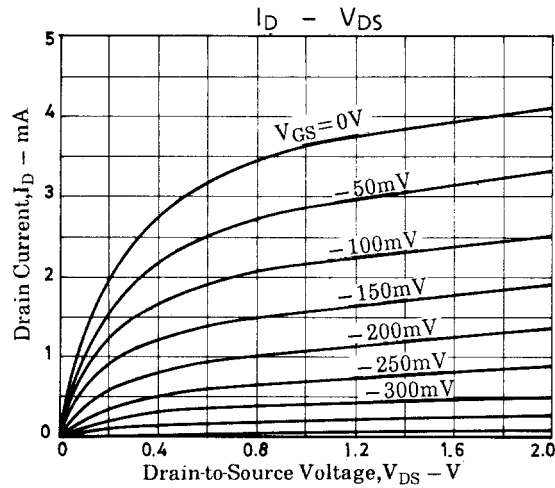
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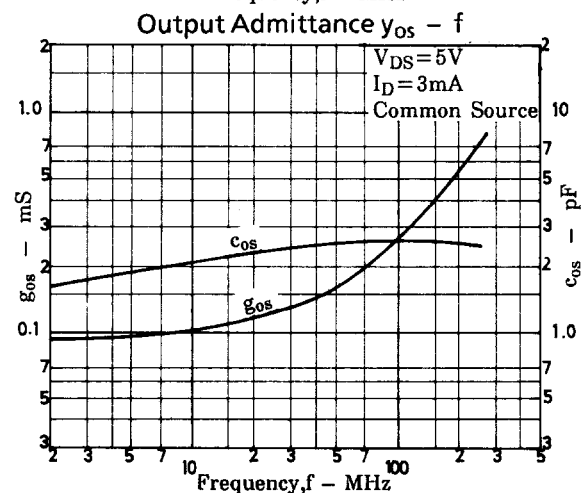
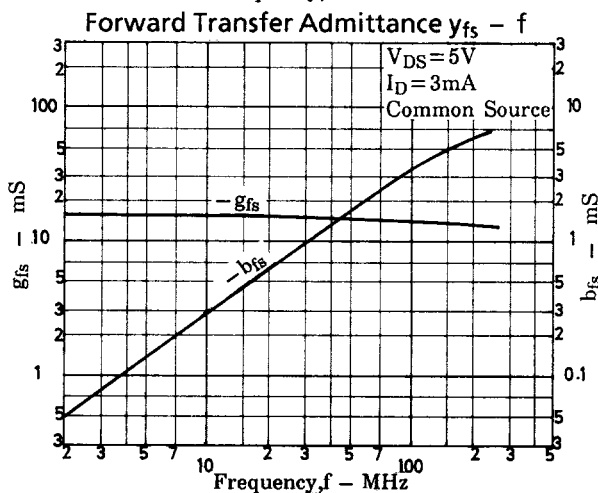
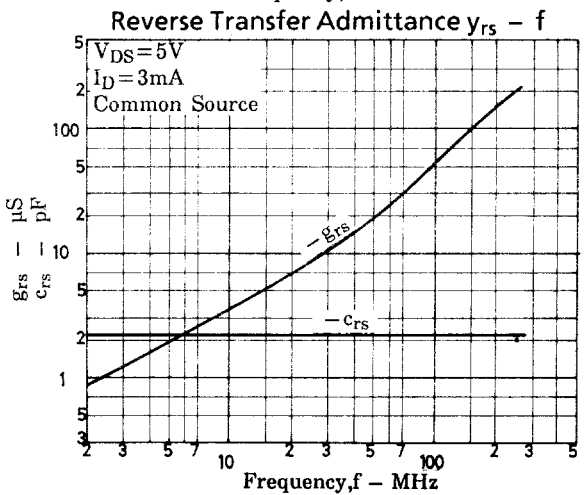
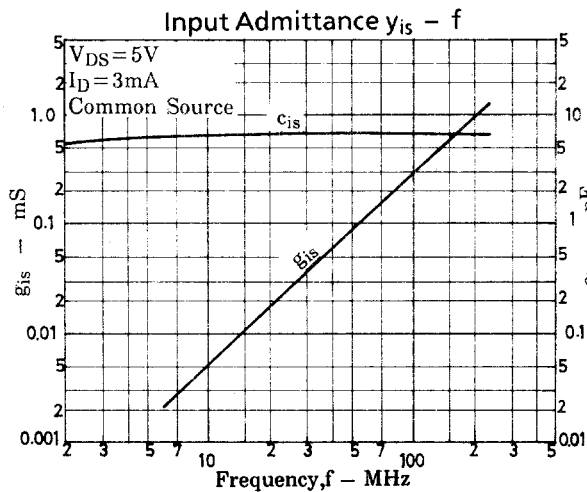
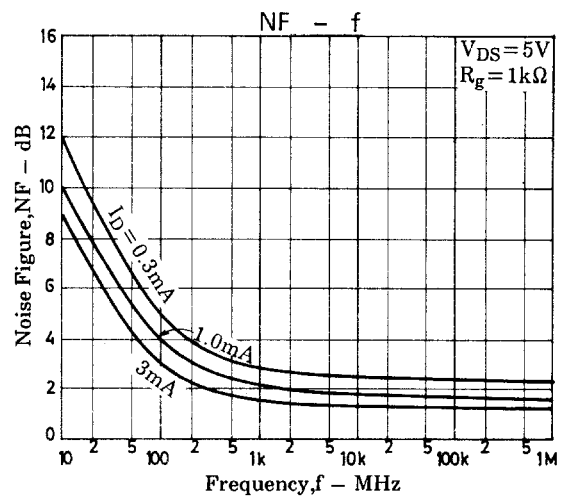
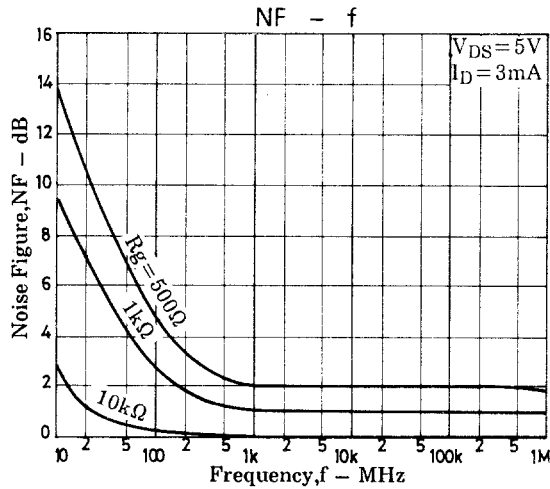
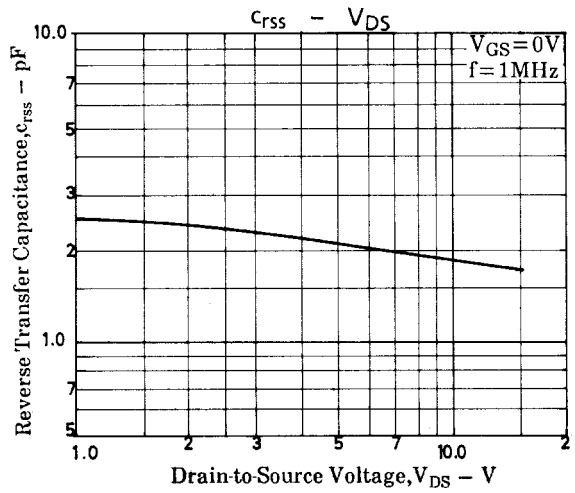
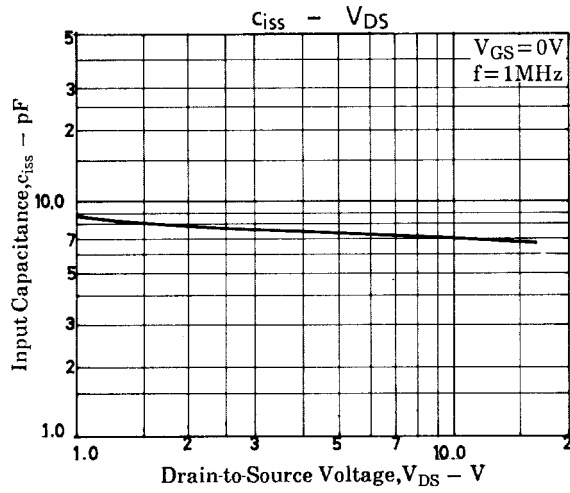
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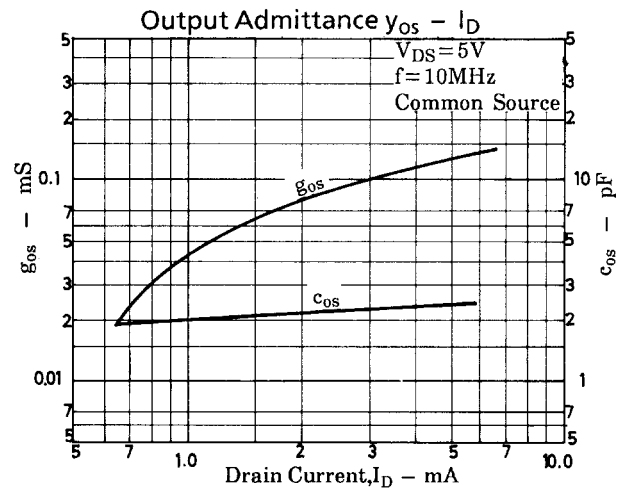
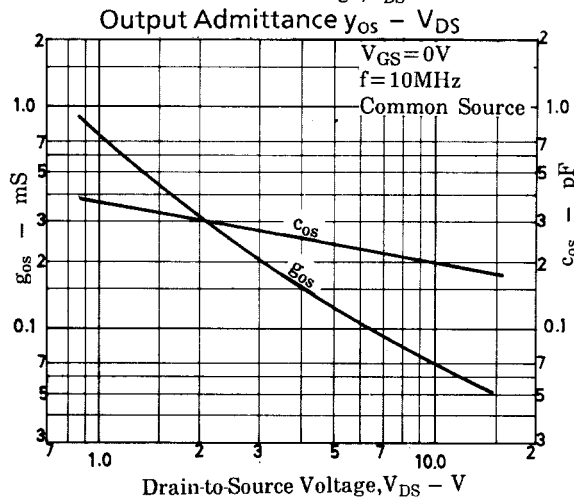
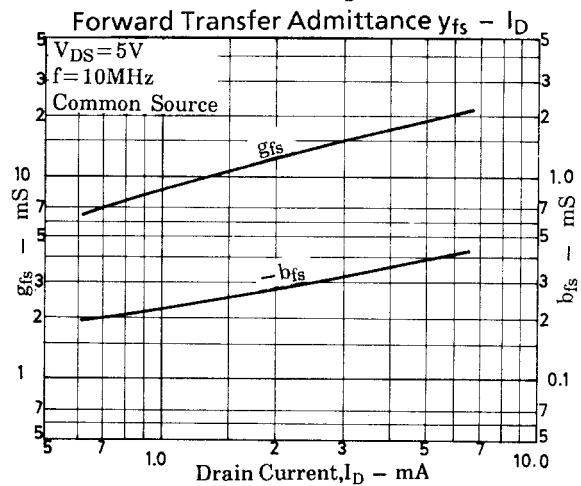
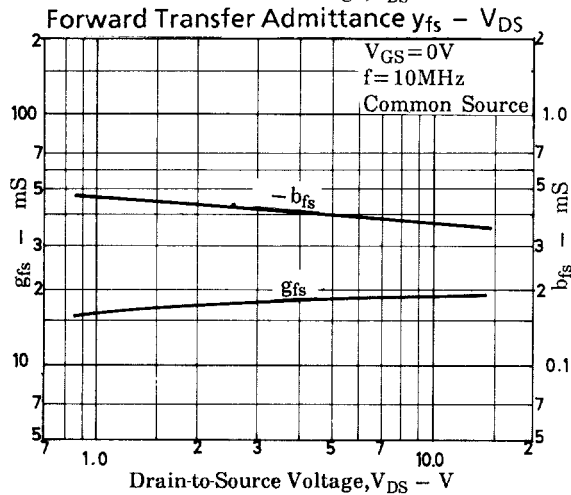
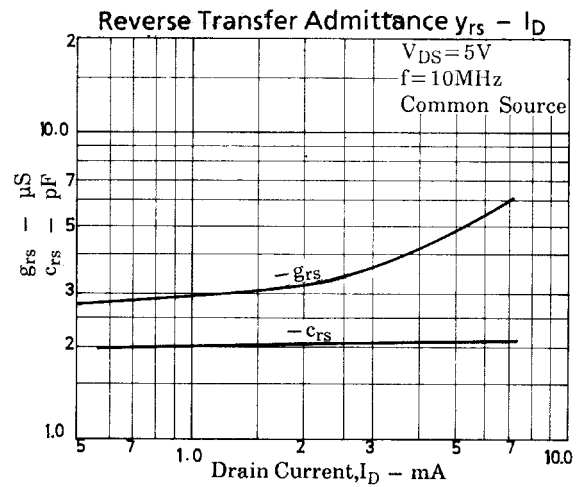
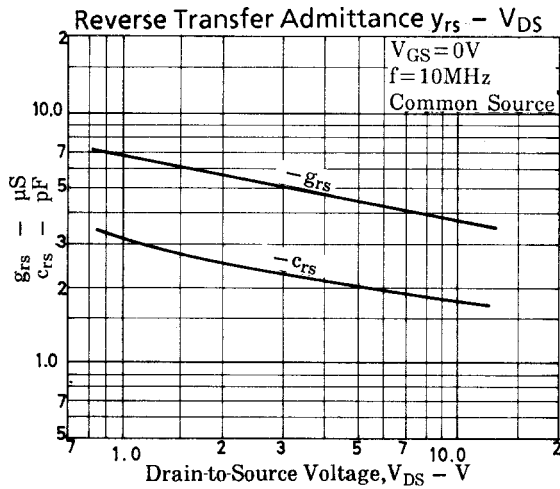
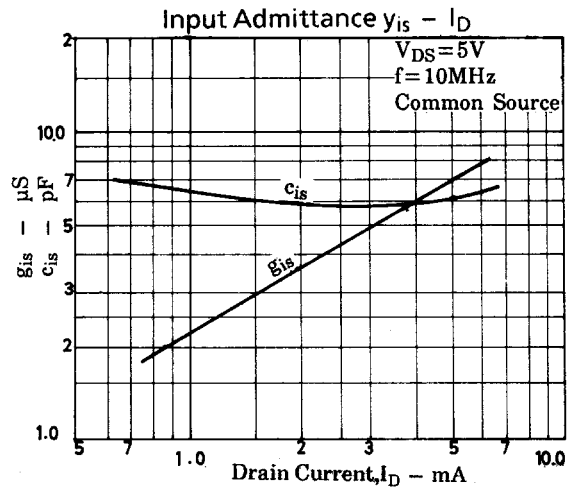
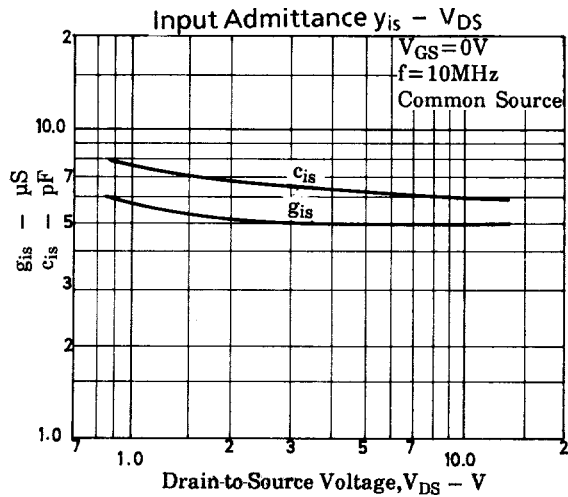
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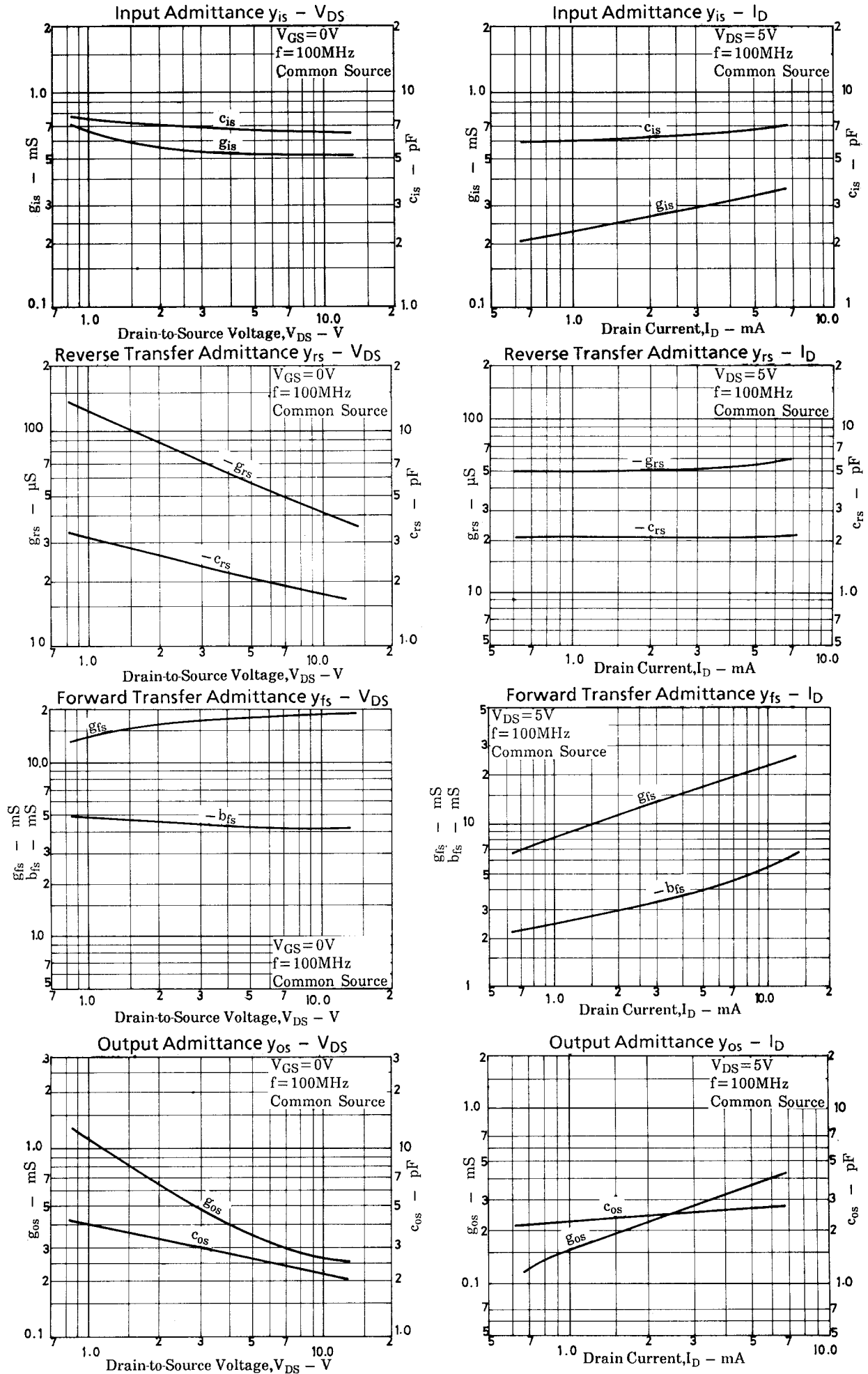
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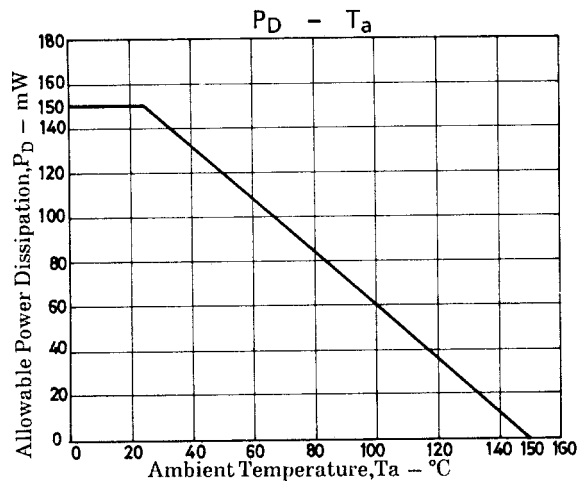
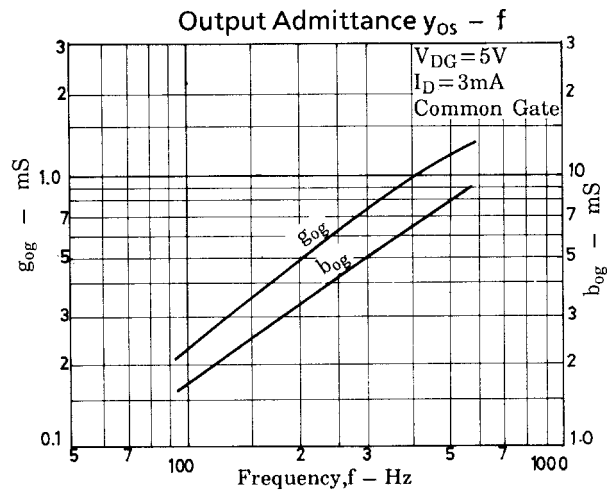
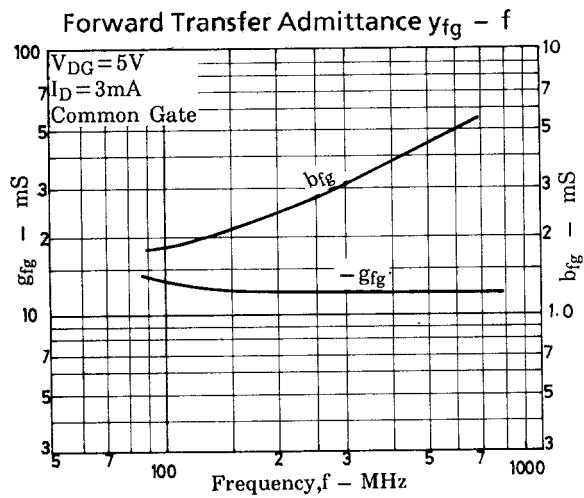
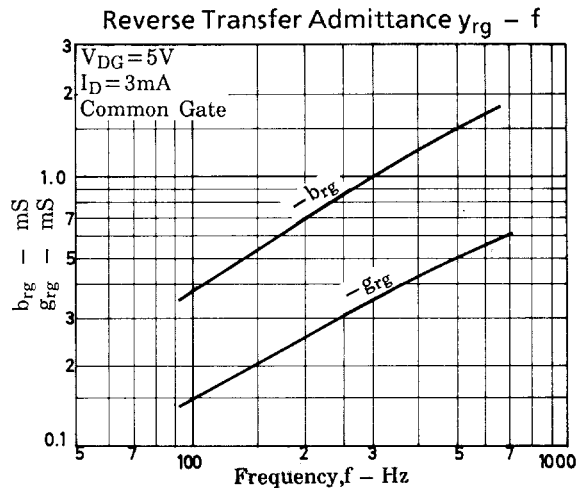
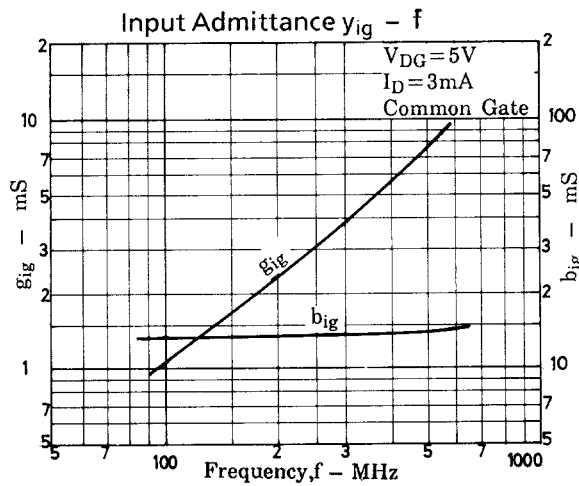
Parameter	Symbol	Conditions	Ratings	Unit
Input Capacitance	C_{iss}	$V_{DS}=5V, V_{GS}=0, f=1MHz$	7.0	pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=5V, V_{GS}=0, f=1MHz$	2.0	pF
Noise Figure	NF	$V_{DS}=5V, R_g=1k\Omega, I_D=1mA, f=1kHz$	1.5	dB











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