

FM Tuner Applications

Features

- Ideal for FM tuners in low-voltage radios, car radios, etc.
- Small-sized package permitting 2SK212-applied sets to be made small and slim.
- Small Crss (Crss=0.04pF typ).
- High $|Y_{fs}|$ ($|Y_{fs}|=6.0\text{mS typ}$).

Absolute Maximum Ratings at Ta=25°C

Absolute Maximum Ratings at Ta = 25°C			unit
Gate-to-Drain Voltage	V _{GDO}	−20	V
Gate Current	I _G	10	mA
Drain Current	I _D	20	mA
Allowable Power Dissipation	P _D	200	mW
Junction Temperature	T _j	125	°C
Storage Temperature	T _{stg}	−55 to +125	°C

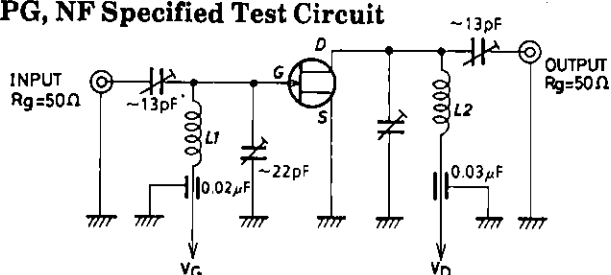
Electrical Characteristics at $T_a = 25^\circ\text{C}$

Electrical Characteristics at Ta = 25°C			min	typ	max	unit
G-D Breakdown Voltage	V _{(BR)GDO}	I _G = -10μA	-20			V
Gate Cutoff Current	I _{GSS}	V _{GS} = -0.5V, V _{DS} = 0			-10	nA
Drain Current	I _{DSS}	V _{DS} = 5V, V _{GS} = 0	0.6※		12.0※	mA
Cutoff Voltage	V _{GS(off)}	V _{DS} = 5V, I _D = 10μA			-2.5	V
Forward Transfer Admittance	Y _{fs}	(1)V _{DS} = 5V, V _{GS} = 0, f = 1kHz	2.0	6.0		mS
	Y _{fs}	(2)V _{DS} = 5V, V _{GS} = 0, f = 100MHz	2.0	6.0		mS
Input Capacitance	Ciss	V _{DS} = 5V, V _{GS} = 0, f = 1MHz		4.0		pF
Reverse Transfer Capacitance	Crss	V _{DS} = 5V, V _{GS} = 0, f = 1MHz		0.04	0.15	pF
Output Capacitance	Coss	V _{DS} = 5V, V _{GS} = 0, f = 1MHz		4.0		pF
Power Gain	PG	V _{DS} = 5V, V _{GS} = 0, f = 100MHz		21		dB
Noise Figure	NF	See specified Test Circuit.		3.5	6.0	dB

※ : The 2SK212 is classified by I_{DSS} as follows : (unit : mA)

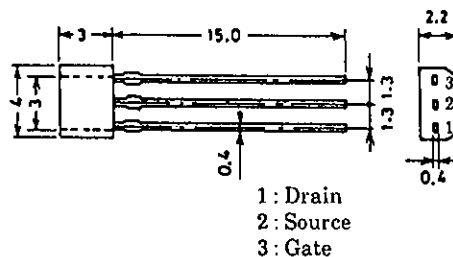
0.6 C 1.5	1.2 D 3.0	2.5 E 6.0	5.0 F 12.0
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PG, NF Specified Test Circuit



L1 : 1mm $\varnothing$ tin-plated wire, air core 10mm $\varnothing$ 4.5T
L2 : 1mm $\varnothing$ tin-plated wire, air core 10mm $\varnothing$ 3.5T

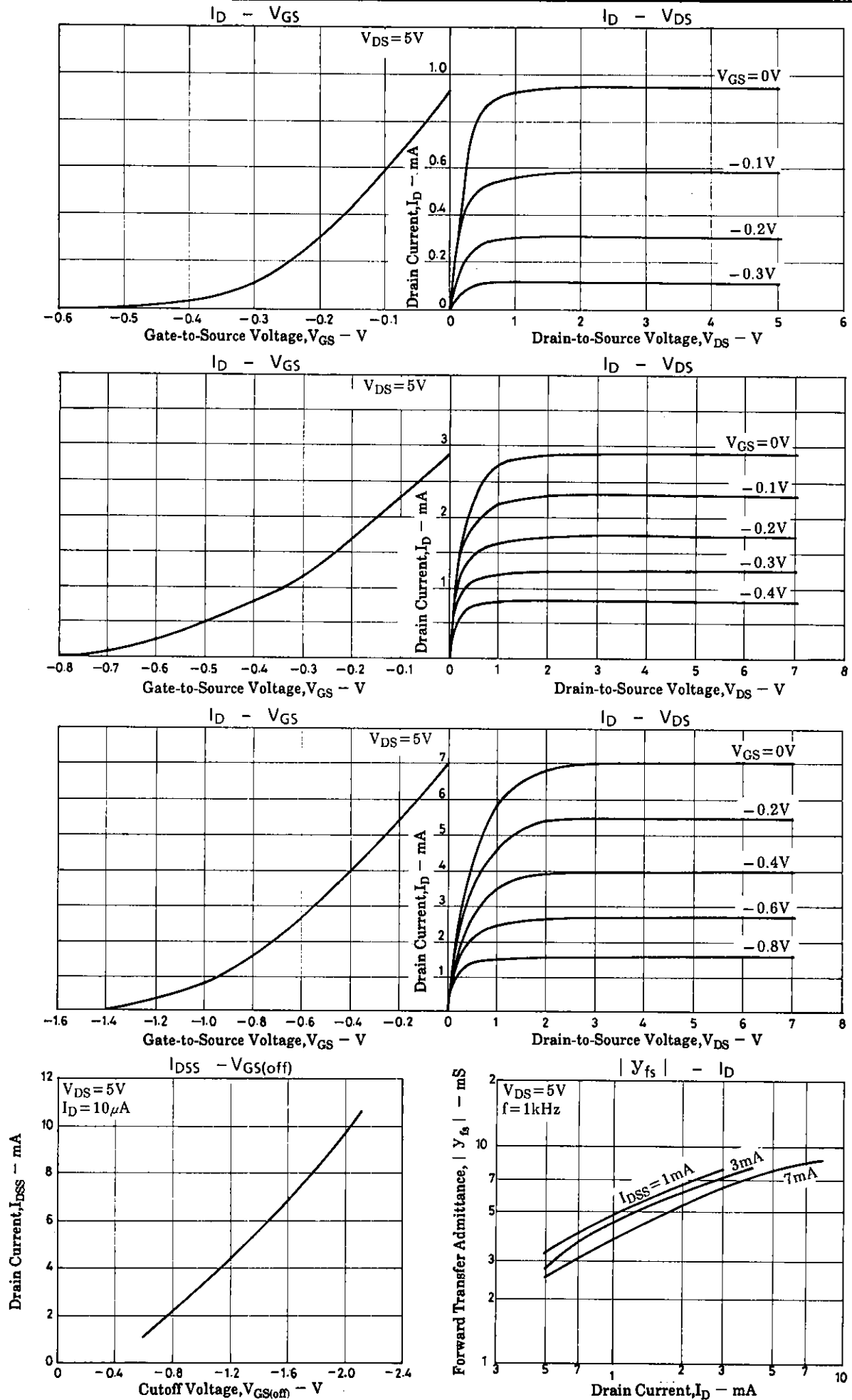
Package Dimensions 2040A
(unit : mm)

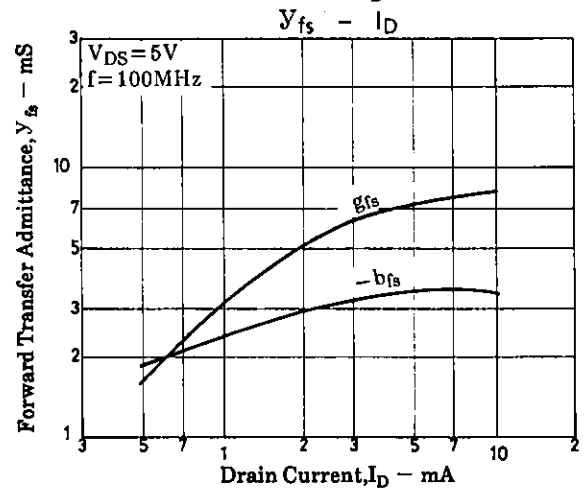
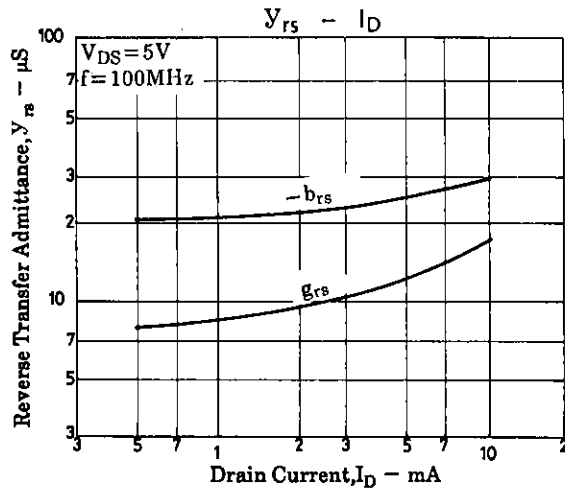
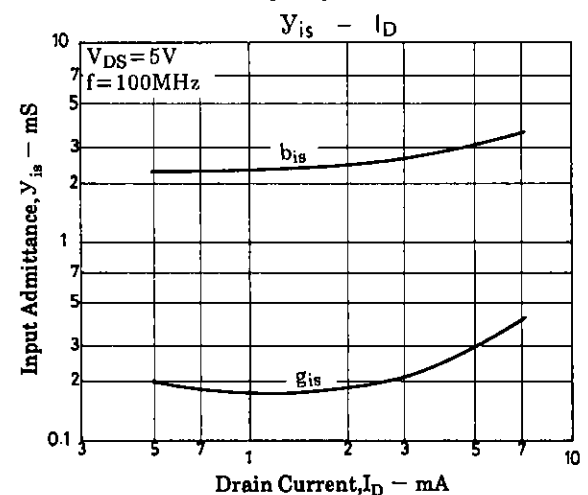
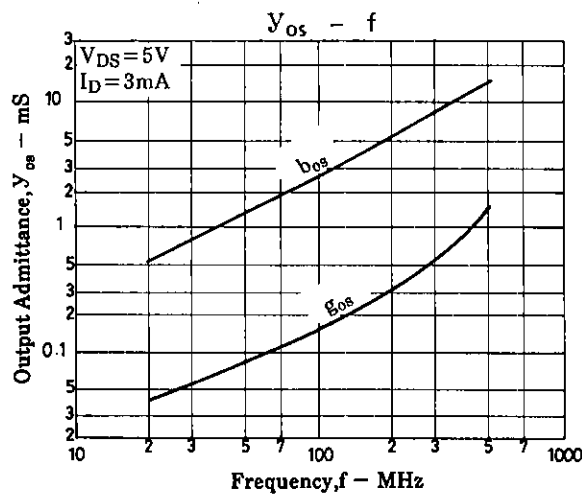
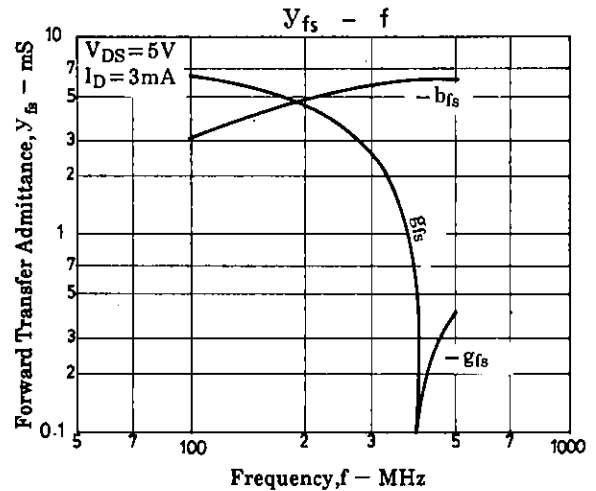
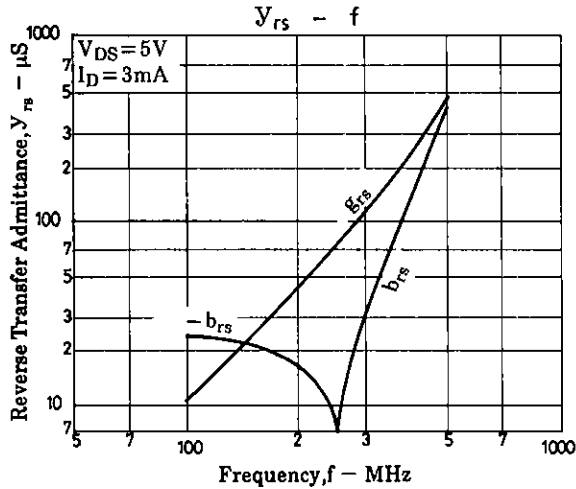
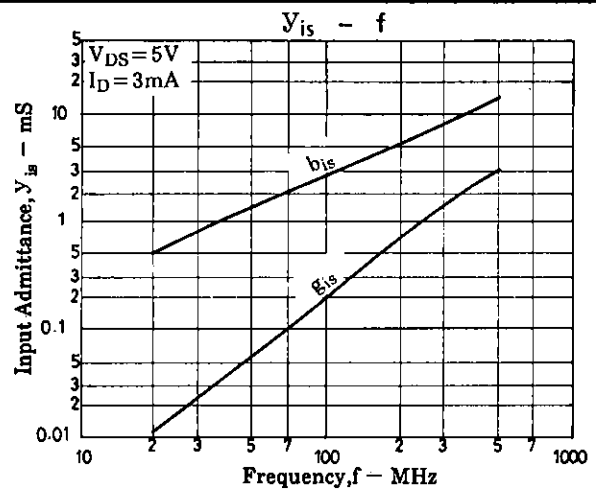
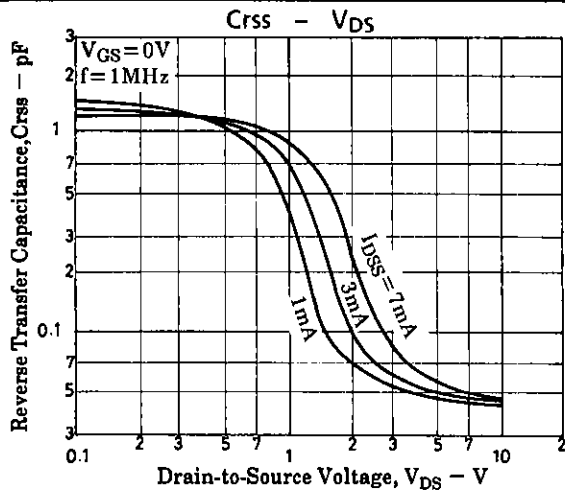


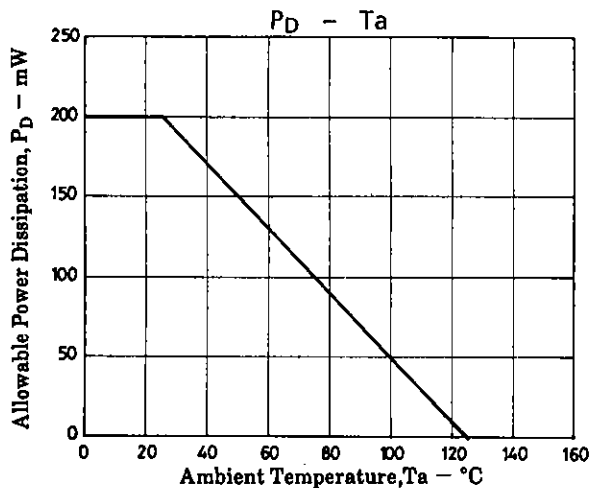
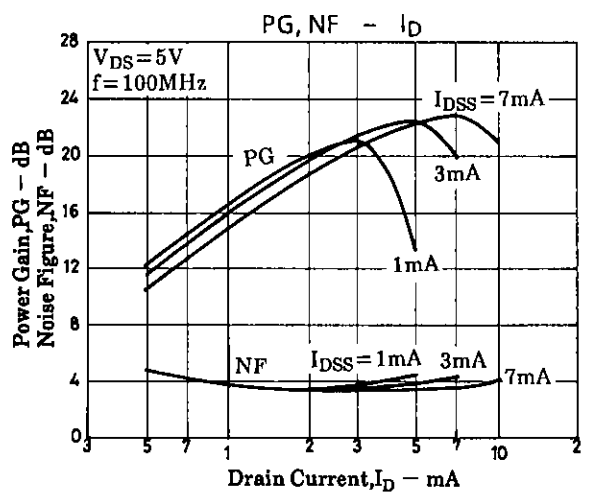
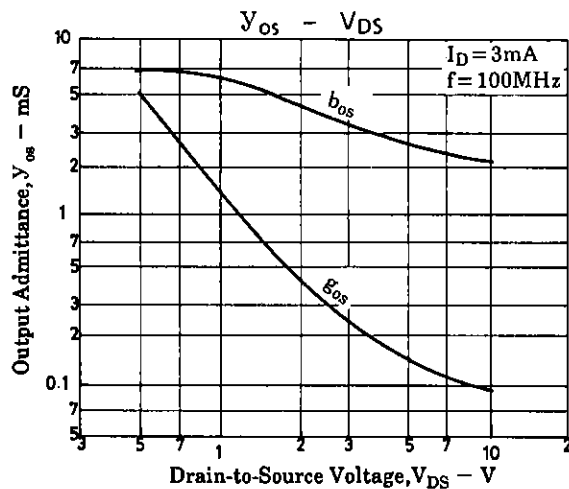
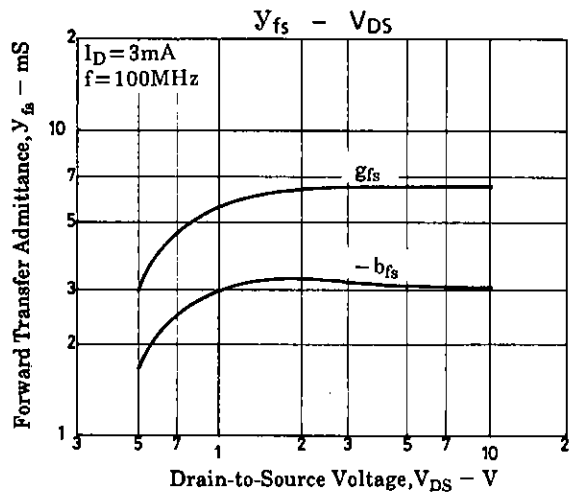
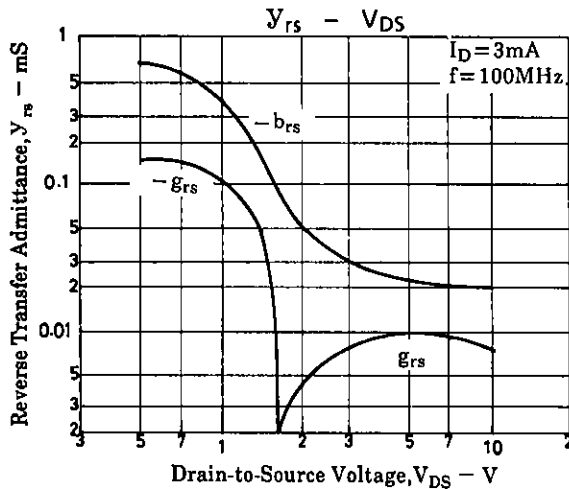
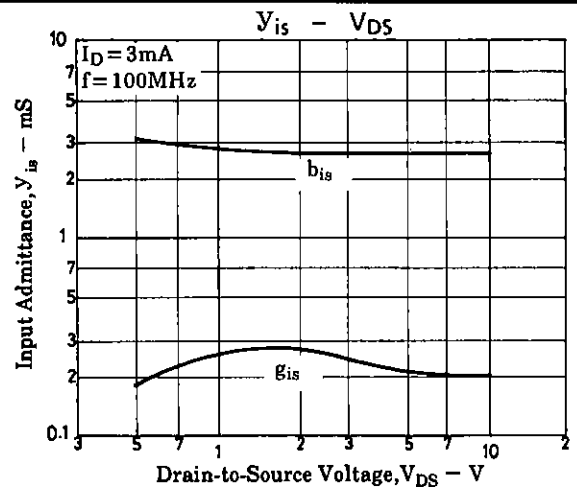
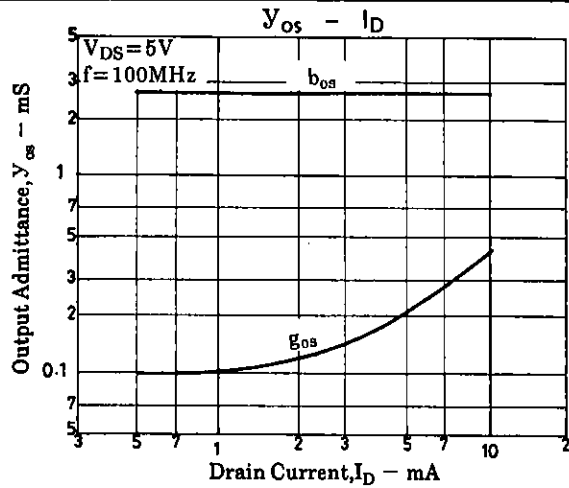
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