



2SK315

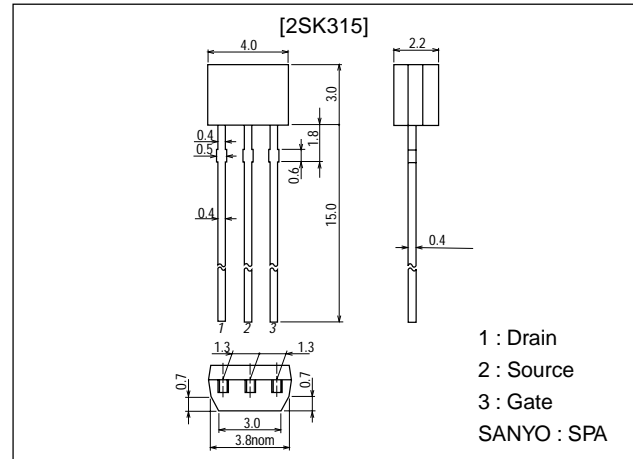
FM Tuner Applications

Features

- Ideal for FM tuners in radios, stereos, etc.
- Because it is compactly packaged, sets can be made compact.
- Small Crss (Crss=0.08pF typ).
- High y_{fs} (y_{fs}=12.0ms typ).

Package Dimensions

unit:mm
2040A



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	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 Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	V _{(BR)GDO}	I _G =-10μA	-20			V
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} =-0.5V, V _{DS} =0V			-10	nA
Zero-Gate Voltage Drain Current	I _{DSS} *	V _{DS} =5V, V _{GS} =0V	2.5*		24.0*	mA
Cutoff Voltage	V _{GS(off)}	V _{DS} =5V, I _D =10μA			-3.5	V
Forward Transfer Admittance	y _{fs} 1	V _{DS} =5V, V _{GS} =0V, f=1kHz	6.0	12.0		ms
	y _{fs} 2	V _{DS} =5V, V _{GS} =0V, f=100MHz	6.0	12.0		ms
Input Capacitance	C _{iss}	V _{DS} =5V, V _{GS} =0V, f=1MHz		8.0		pF
Output Capacitance	C _{oss}	V _{DS} =5V, V _{GS} =0V, f=1MHz		6.5		pF
Reverse Transfer Capacitance	Crss	V _{DS} =5V, V _{GS} =0V, f=1MHz		0.08	0.3	pF

* : The 2SK315 is classified as follows by I_{DSS} (unit : mA) :

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2.5	E	6.0	5.0	F	12.0	10.0	F	24.0
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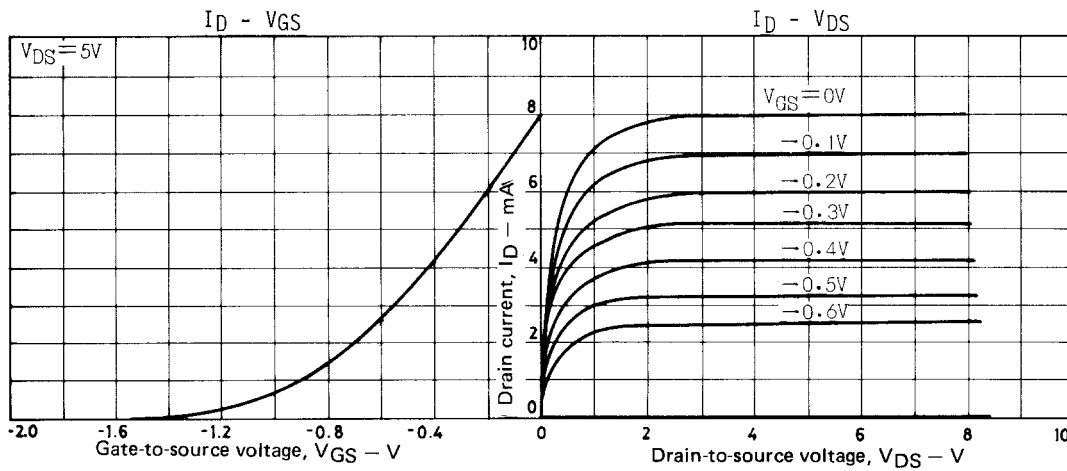
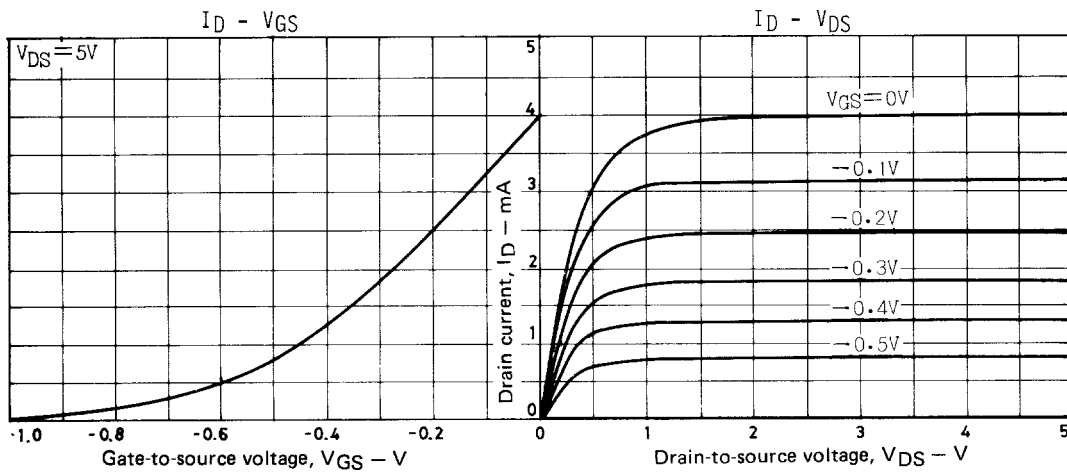
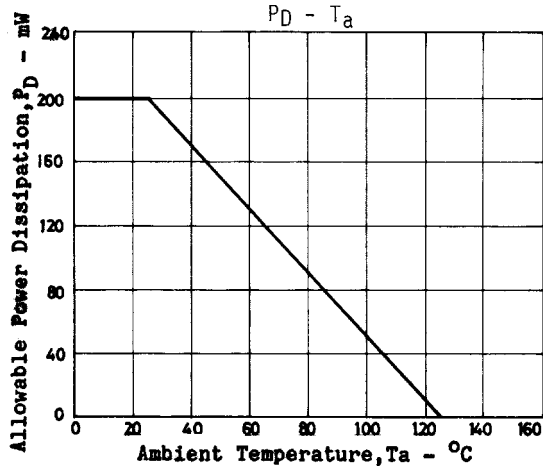
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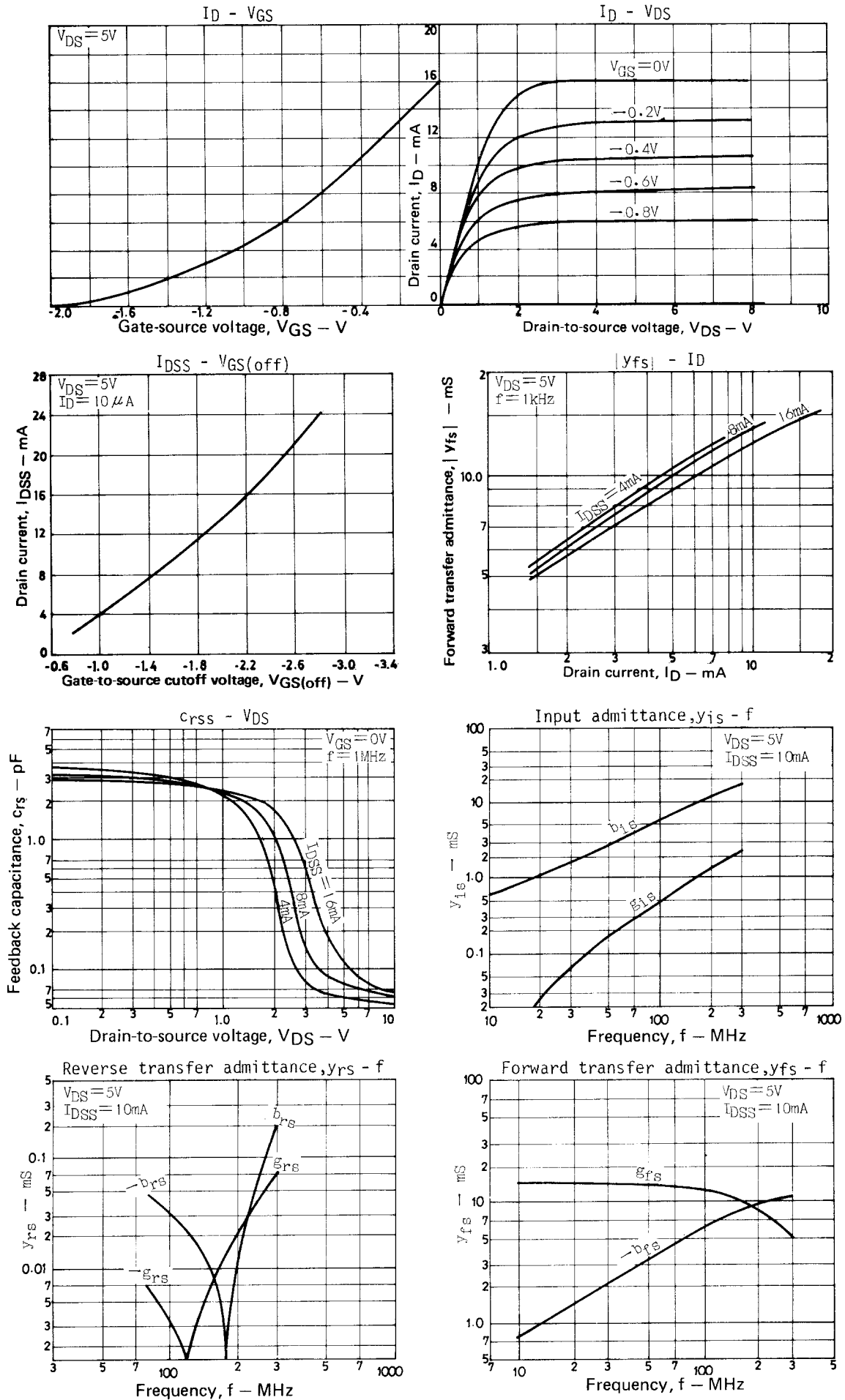
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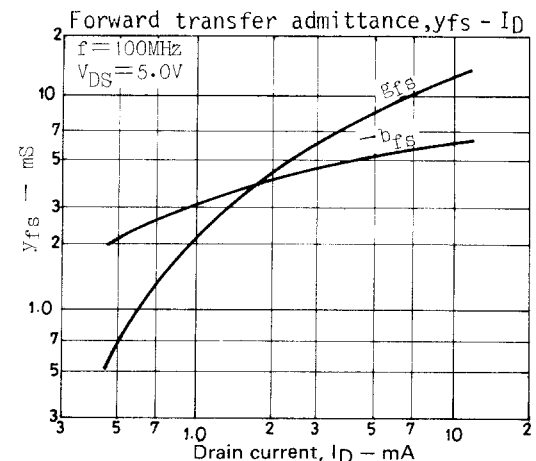
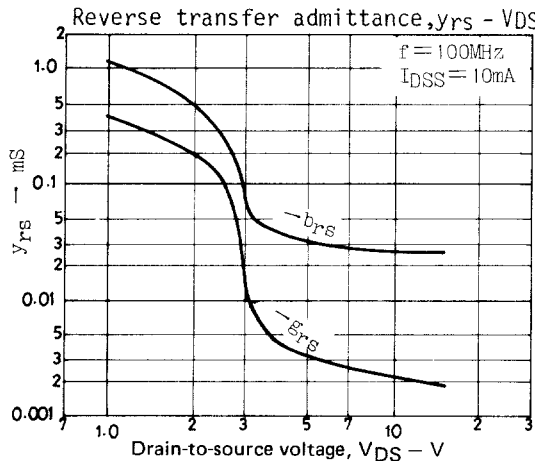
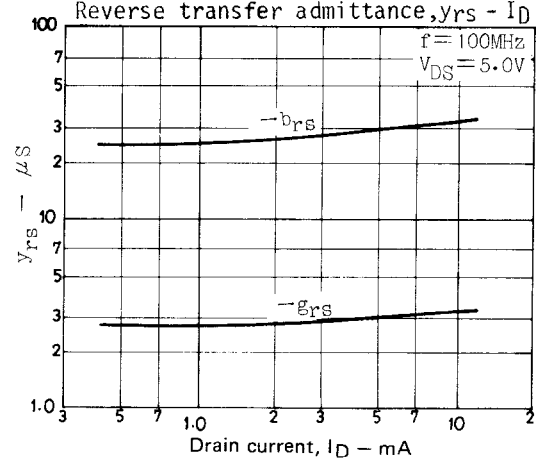
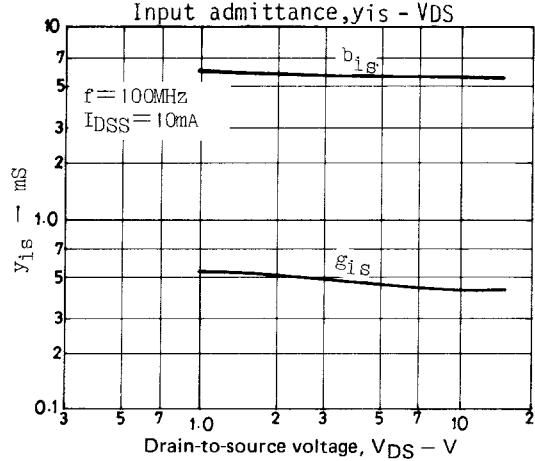
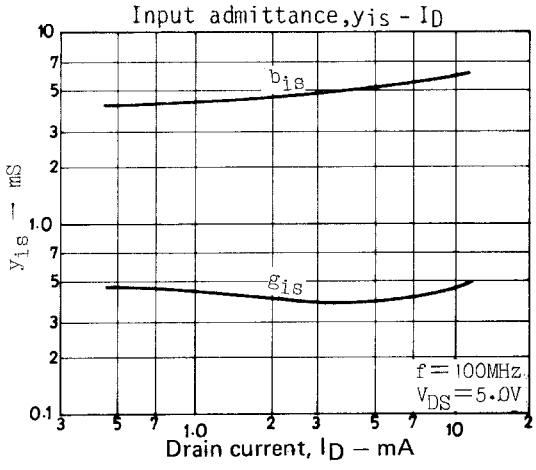
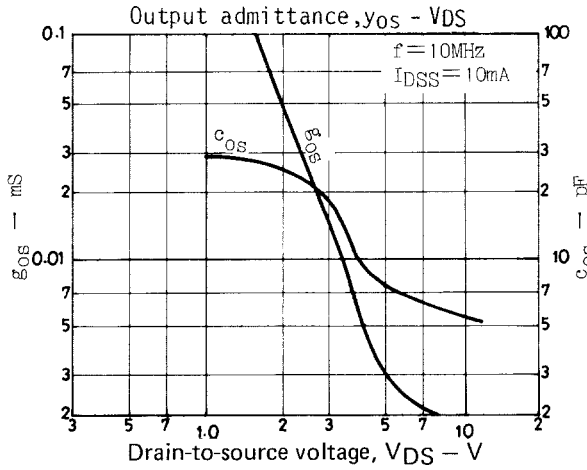
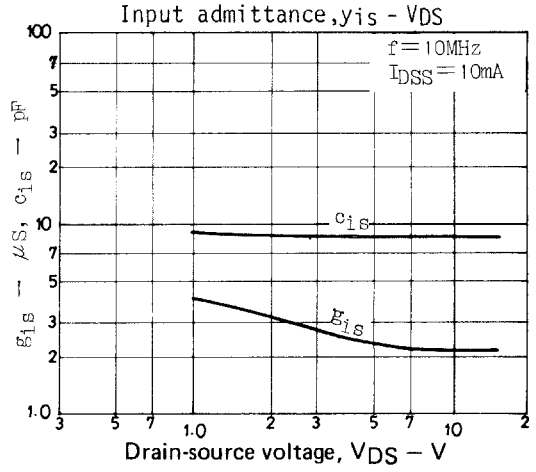
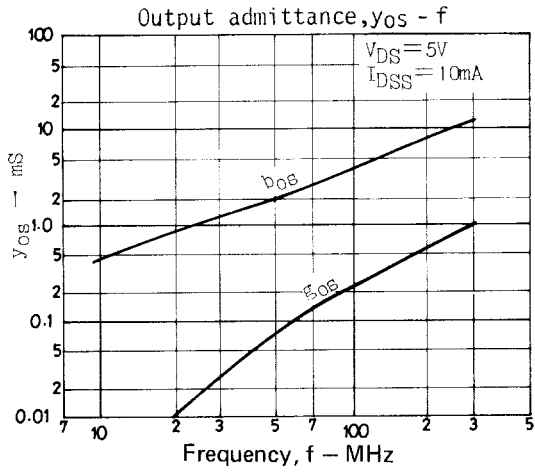
Parameter	Symbol	Conditions	Ratings		Unit
Power Gain	PG	$V_{DS}=5V, V_{GS}=0V, f=100MHz$, Refer to specified Test Circuit	23		dB
Noise Figure	NF	$V_{DS}=5V, V_{GS}=0V, f=100MHz$, See specified Test Circuit	2.2	4.0	dB



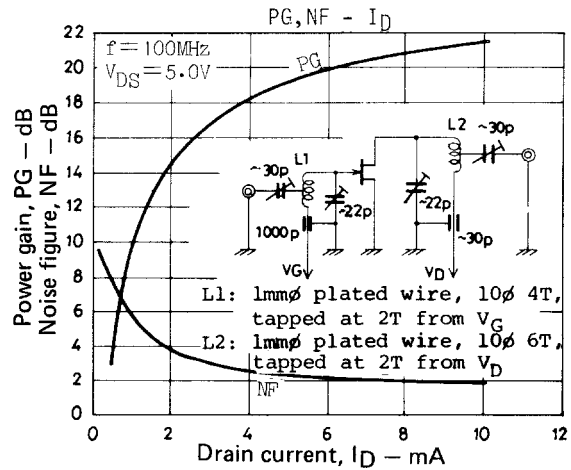
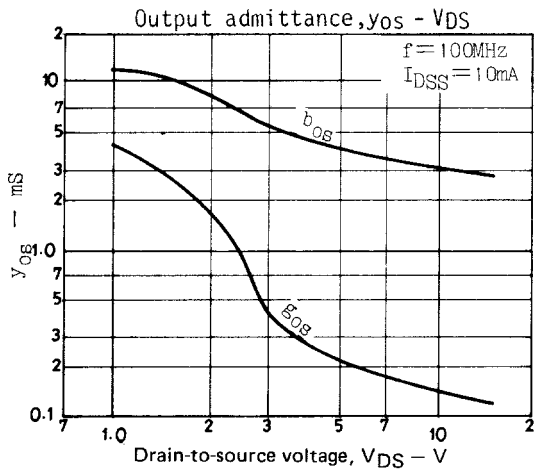
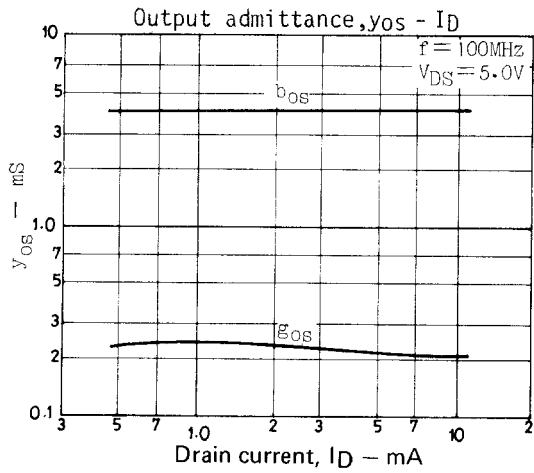
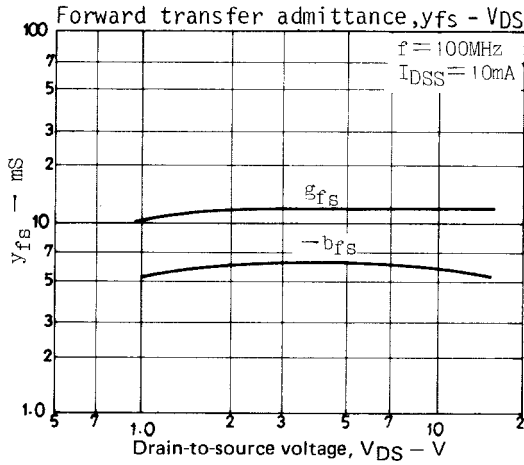
2SK315



2SK315



2SK315



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