

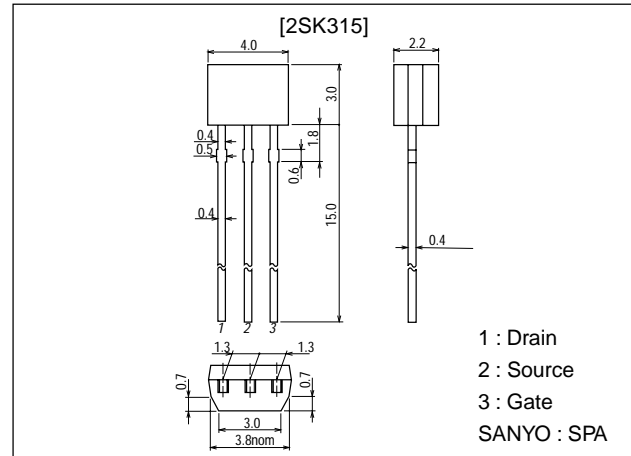
**2SK315****FM Tuner Applications****Features**

- 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	$V_{(BR)GDO}$	$I_G = -10\mu A$	-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	$V_{GS(off)}$	$V_{DS} = 5V, I_D = 10\mu A$			-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	C_{rss}	$V_{DS} = 5V, V_{GS} = 0V, f = 1MHz$		0.08	0.3	pF

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

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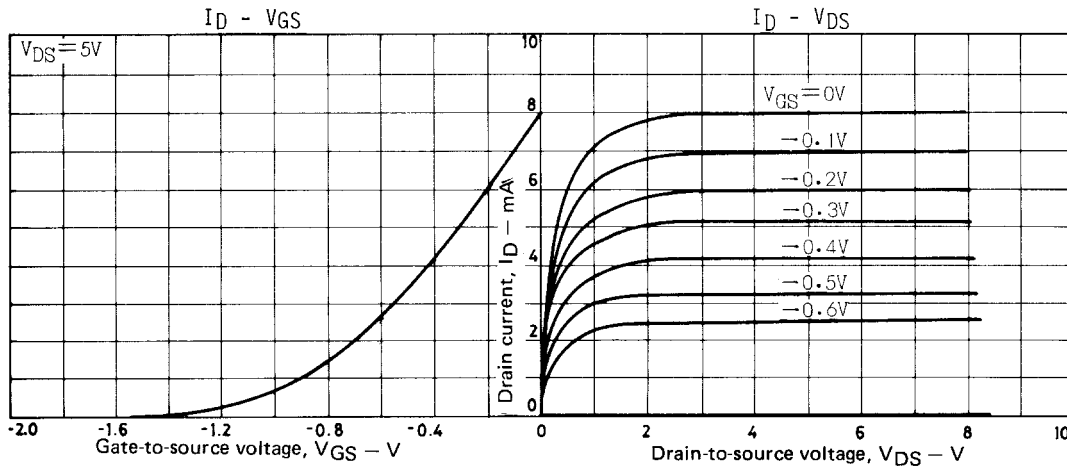
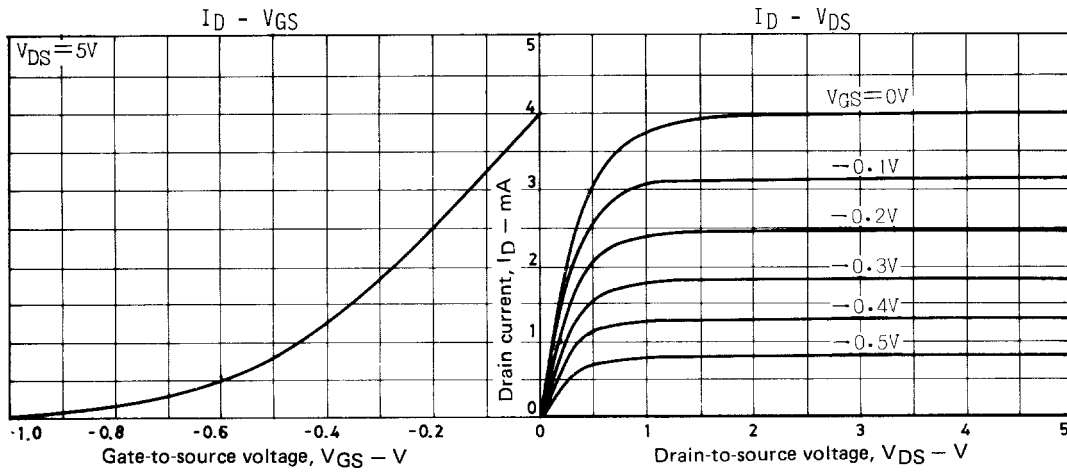
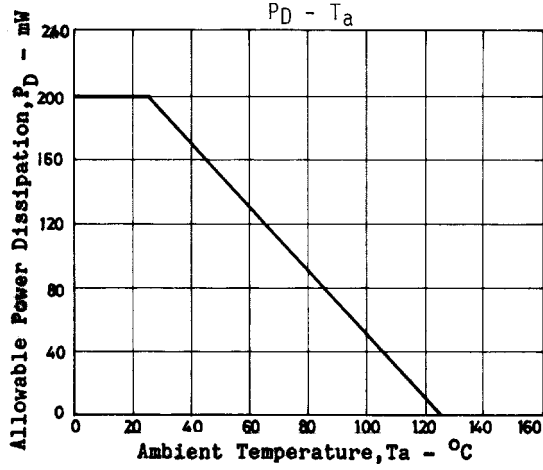
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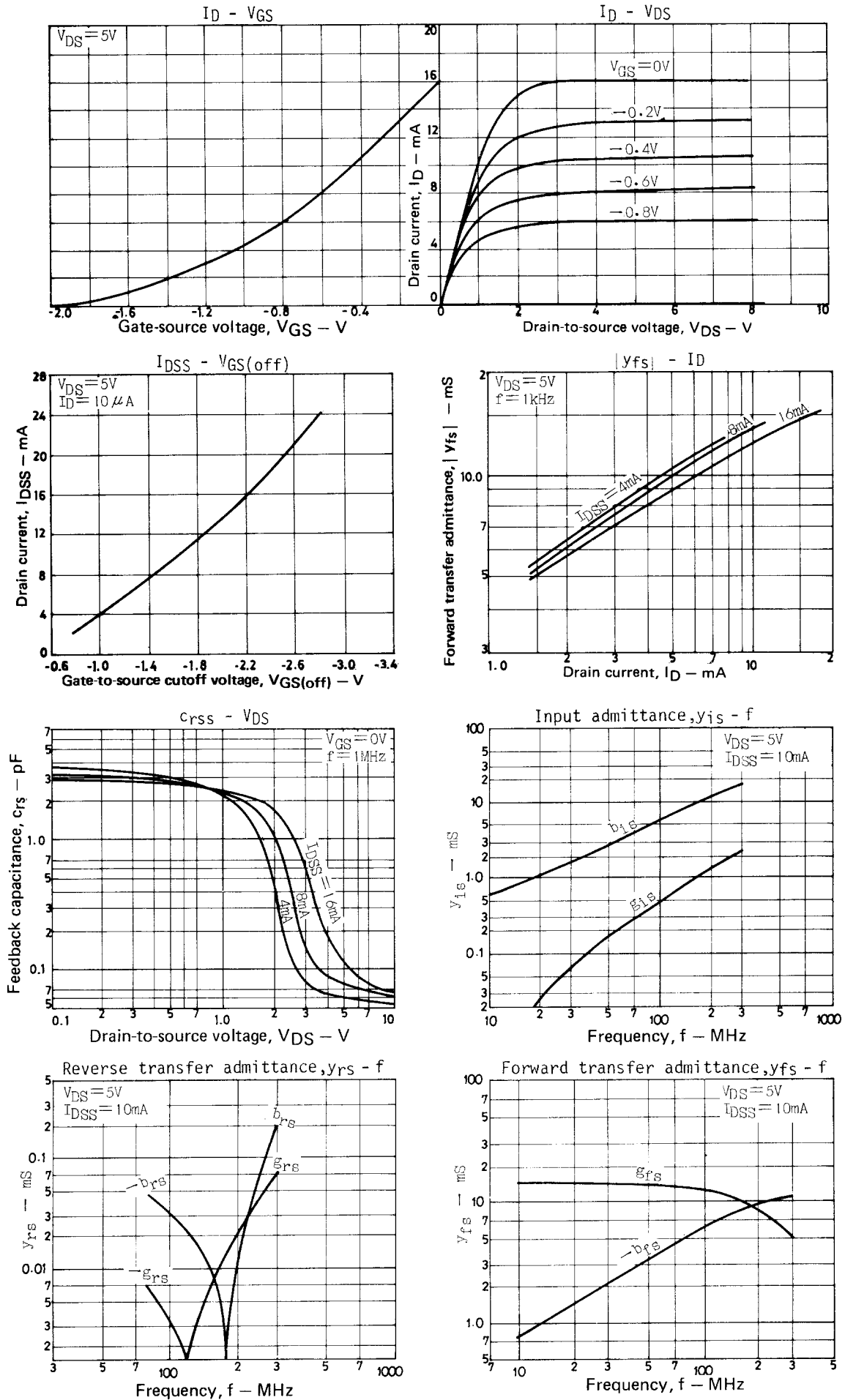
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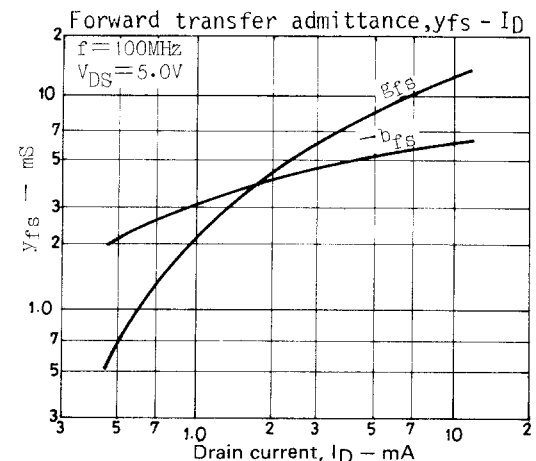
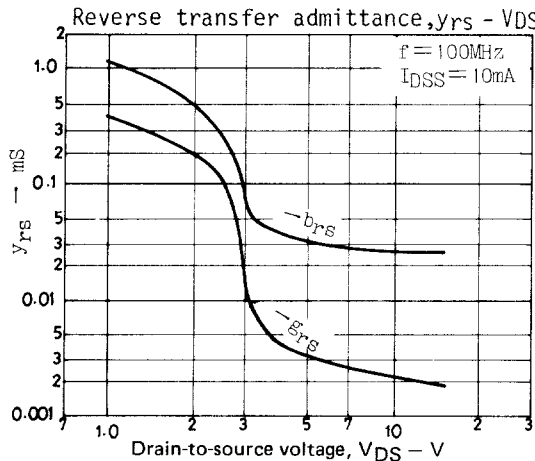
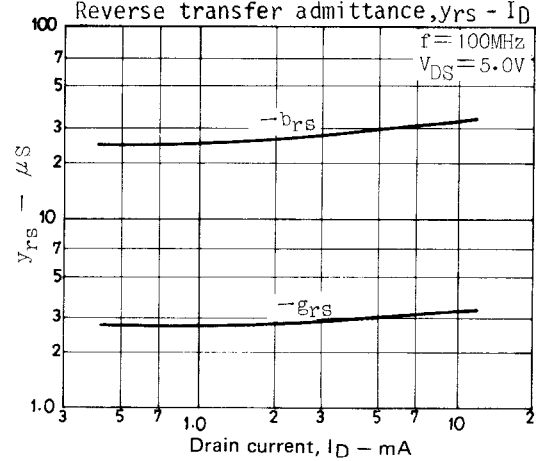
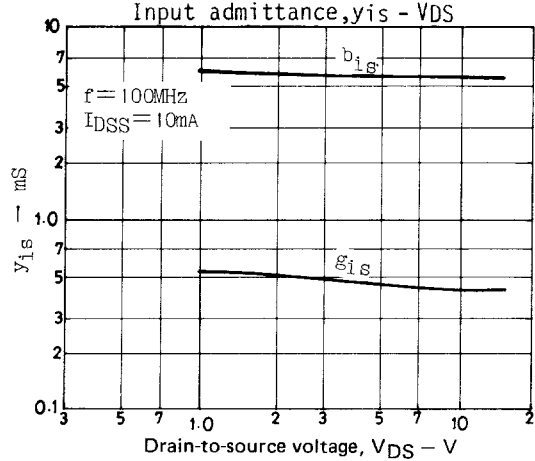
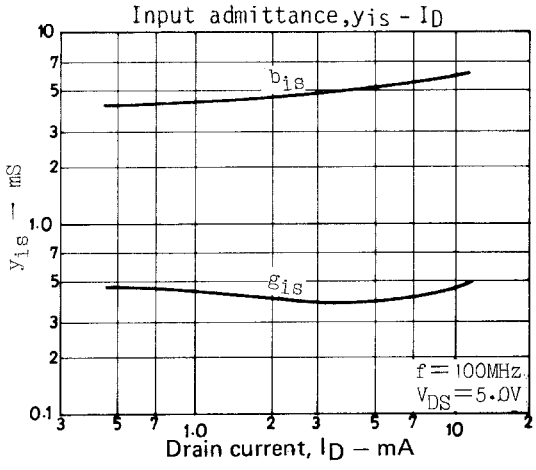
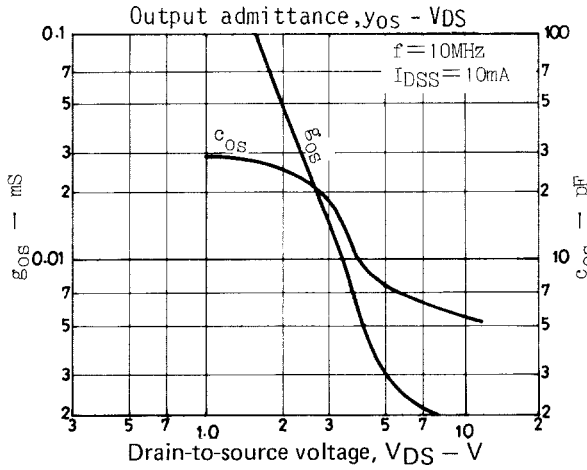
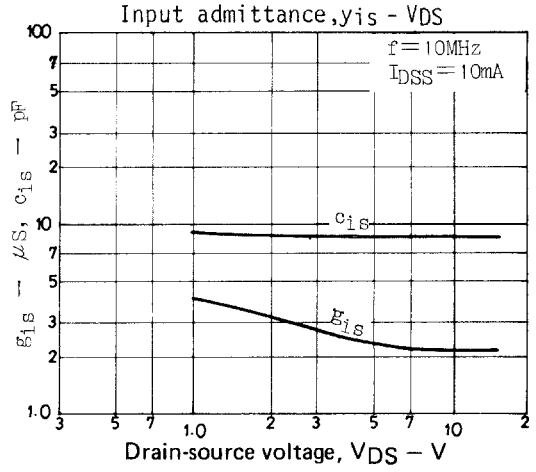
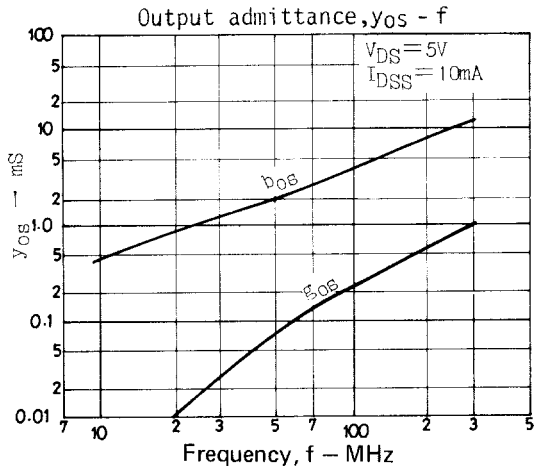
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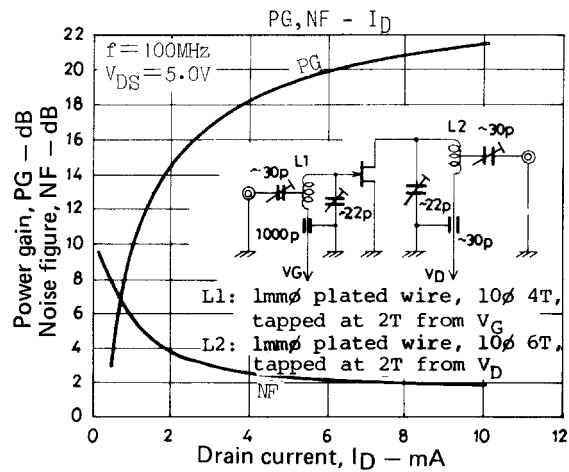
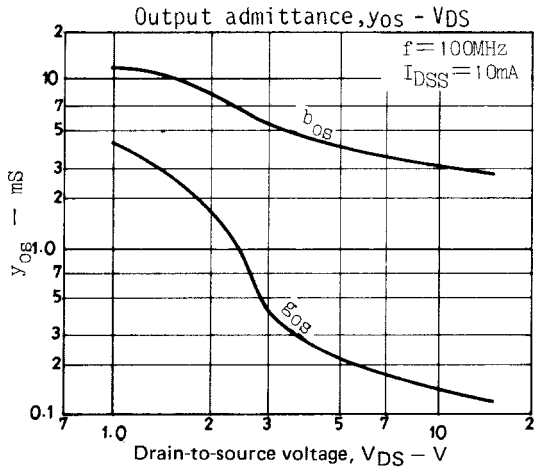
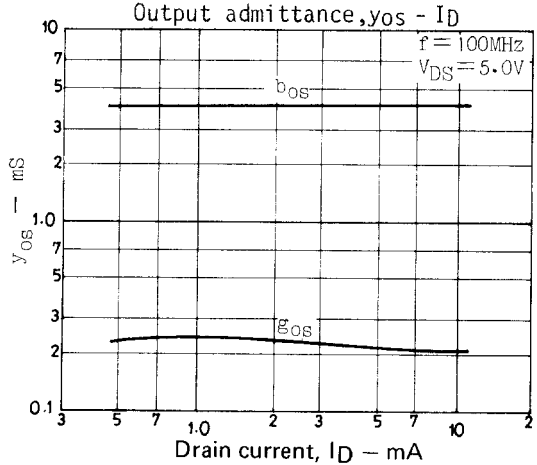
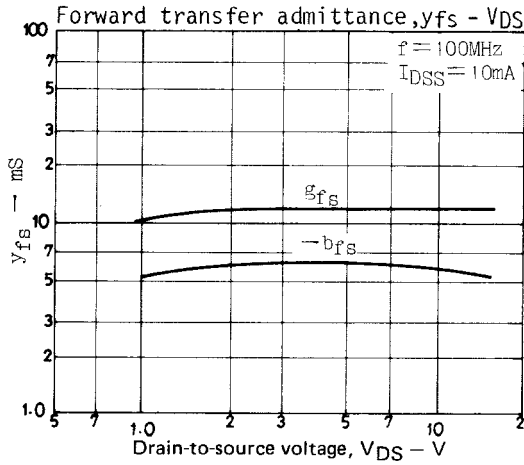
Parameter	Symbol	Conditions	Ratings		Unit
Power Gain	PG	$V_{DS}=5V, V_{GS}=0V, f=100MHz$, Refer to specified Test Circuit	23		dB
Noise Figure	NF	$V_{DS}=5V, V_{GS}=0V, f=100MHz$, See specified Test Circuit	2.2	4.0	dB



2SK315







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