

**3SK263**

FM Tuner, VHF Tuner, High-Frequency Amplifier Applications

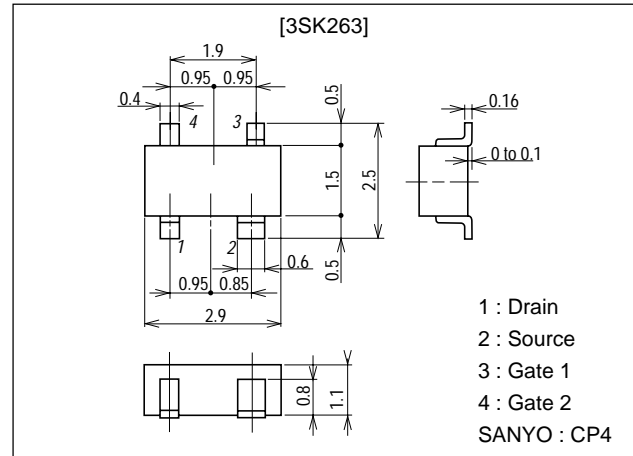
Features

- Enhancement type.
- Small noise figure.
- Small cross modulation.

Package Dimensions

unit:mm

2096A



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DS}		15	V
Gate1-to-Source Voltage	V_{G1S}		± 8	V
Gate2-to-Source Voltage	V_{G2S}		± 8	V
Drain Current	I_D		30	mA
Allowable Power Dissipation	P_D		200	mW
Channel Temperature	T_{ch}		125	°C
Storage Temperature	T_{stg}		-55 to +125	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Voltage	V_{DS}	$V_{G1S}=0V, V_{G2S}=0V, I_D=100\mu A$	15			V
Gate1-to-Source Cutoff Voltage	$V_{G1S(off)}$	$V_{DS}=6V, V_{G2S}=4V, I_D=100\mu A$	0	0.7	1.3	V
Gate2-to-Source Cutoff Voltage	$V_{G2S(off)}$	$V_{DS}=6V, V_{G1S}=3V, I_D=100\mu A$	0.1	0.9	1.6	V
Gate1-to-Source Leakage Current	I_{G1SS}	$V_{G1S}=\pm 6V, V_{G2S}=V_{DS}=0V$			± 50	nA
Gate2-to-Source Leakage Current	I_{G2SS}	$V_{G2S}=\pm 6V, V_{G1S}=V_{DS}=0V$			± 50	nA
Zero-Gate Voltage Drain Current	I_{DSX}	$V_{DS}=6V, V_{G1S}=1.5V, V_{G2S}=4V$	2.5*		24*	mA
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=6V, I_D=10mA, V_{G2S}=4V, f=1kHz$		14		mS

* : The 3SK263 is classified by I_{DSX} as follows : (unit : mA)

Marking : RJ

I_{DSX} rank : 4, 5, 6

2.5	4	6.0	5.0	5	12.0	10.0	6	24.0
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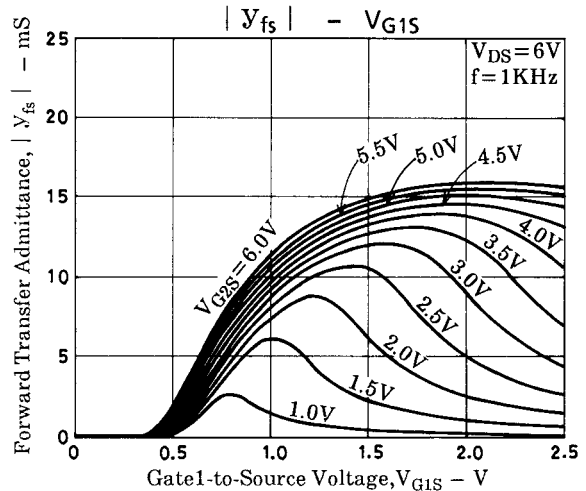
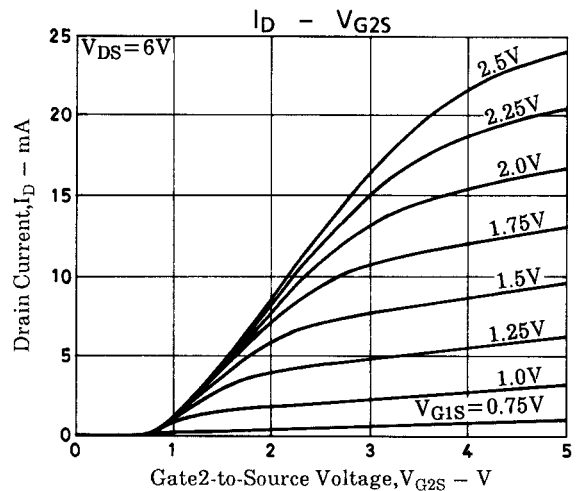
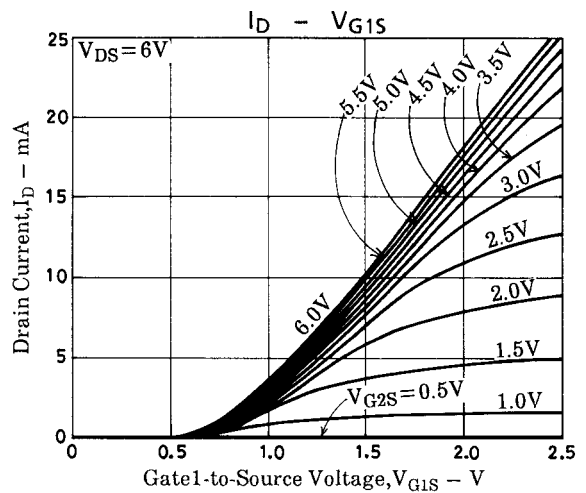
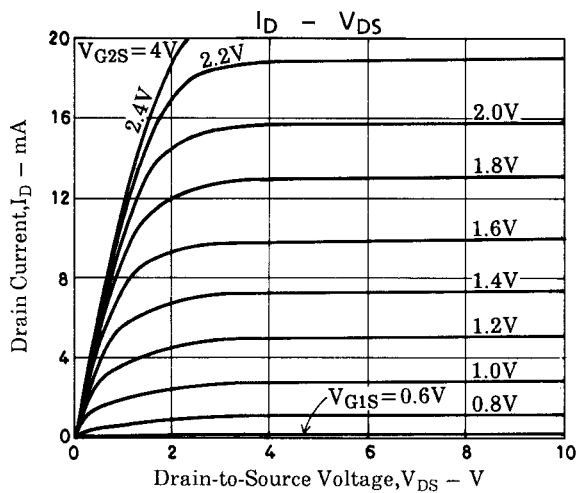
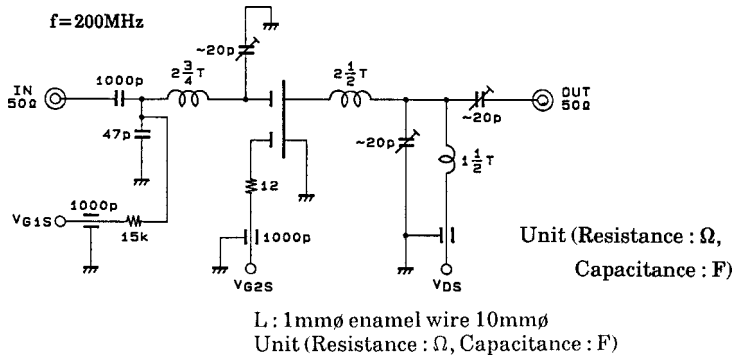
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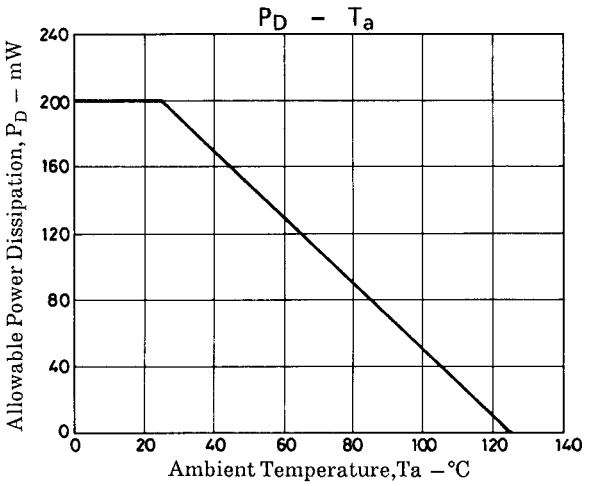
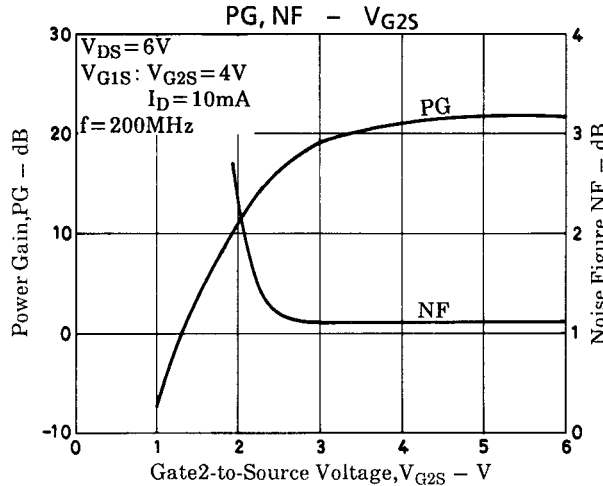
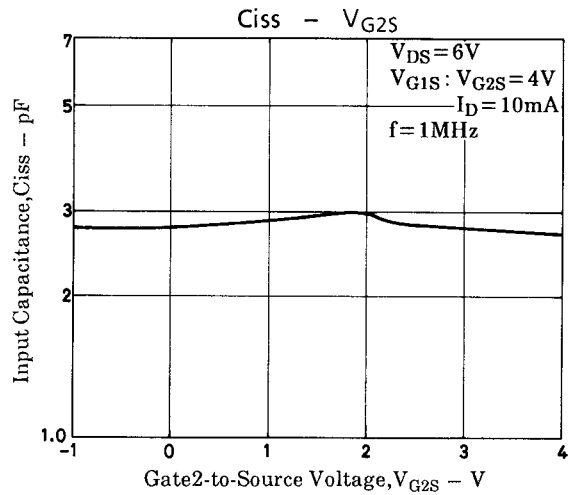
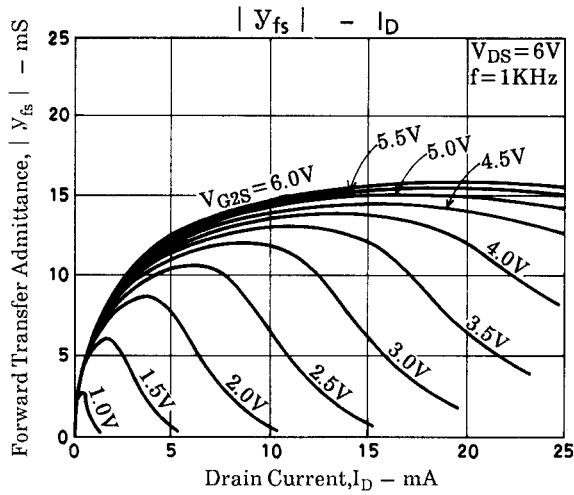
3SK263

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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Input Capacitance	Ciss	$V_{DS}=6V, f=1MHz, V_{G1S}=0V, V_{G2S}=4V$		2.7		pF
Reverse Transfer Capacitance	Crss	$V_{DS}=6V, f=1MHz, V_{G1S}=0V, V_{G2S}=4V$		0.015	0.03	pF
Power Gain	PG	$V_{DS}=6V, I_D=10mA, V_{G2S}=4V, f=200MHz$	18	21		dB
Noise Figure	NF	$V_{DS}=6V, I_D=10mA, V_{G2S}=4V, f=200MHz$		1.1	2.2	dB

PG, NF Specified Test Circuit





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