

	No.4902	3SK265
	N-Channel MOS Silicon FET VHF, CATV Tuner, High-Frequency Amp Applications	

Features

- Enhancement type.
- Easy AGC (Cut off at $V_{G2S}=0V$).
- Small noise figure.
- High power gain.
- Ideally suited for RF amp of CATV wide-band tuners.

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

			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	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

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

			min	typ	max	unit
Drain-to-Source Voltage	V_{DS}	$V_{G1S}=0V, V_{G2S}=0V, I_{DS}=100\mu\text{A}$	15			V
Gate1-to-Source Cutoff Voltage	$V_{G1S(off)}$	$V_{DS}=6V, V_{G2S}=4V, I_D=100\mu\text{A}$	0	0.7	1.3	V
Gate2-to-Source Cutoff Voltage	$V_{G2S(off)}$	$V_{DS}=6V, V_{G1S}=3V, I_D=100\mu\text{A}$	0.1	0.9	1.6	V
Gate1 Cutoff Current	I_{G1SS}	$V_{G1S}=\pm 6V, V_{G2S}=V_{DS}=0V$			± 50	nA
Gate2 Cutoff Current	I_{G2SS}	$V_{G2S}=\pm 6V, V_{G1S}=V_{DS}=0V$			± 50	nA
Drain Current	I_{DSX}	$V_{DS}=6V, V_{G1S}=1.2V, V_{G2S}=4V$	5.0*		24.0*	mA
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS}=6V, I_D=10\text{mA}, V_{G2S}=4V, f=1\text{kHz}$		22		mS
Input Capacitance	C_{iss}	$V_{DS}=6V, V_{G1S}=0V$		4.0		pF
Reverse Transfer Capacitance	C_{rss}	$V_{G2S}=4V, f=1\text{MHz}$		0.015	0.03	pF
Power Gain	PG	$V_{DS}=6V, I_D=10\text{mA}$	23	26		dB
Noise Figure	NF	$V_{G2S}=4V, f=200\text{MHz}$		1.1	2.2	dB

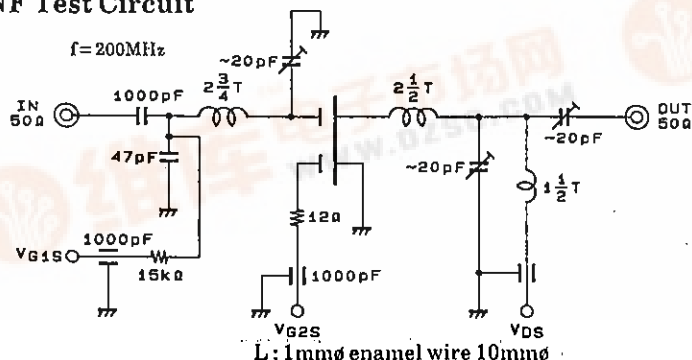
* : The 3SK265 is classified by I_{DSX} as follows : (unit : mA)

5.0	5	12.0	10.0	6	24.0
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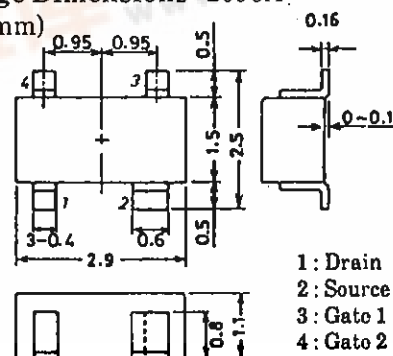
Marking : TJ

I_{DSX} rank : 5, 6

PG, NF Test Circuit

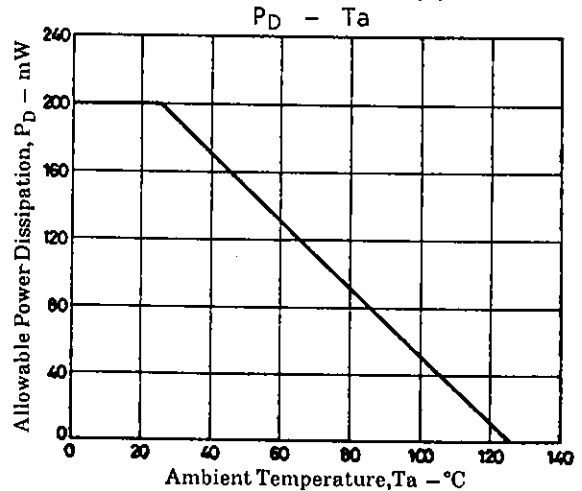
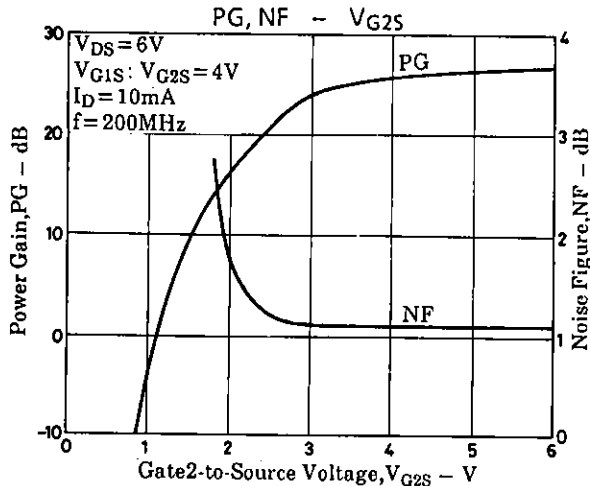
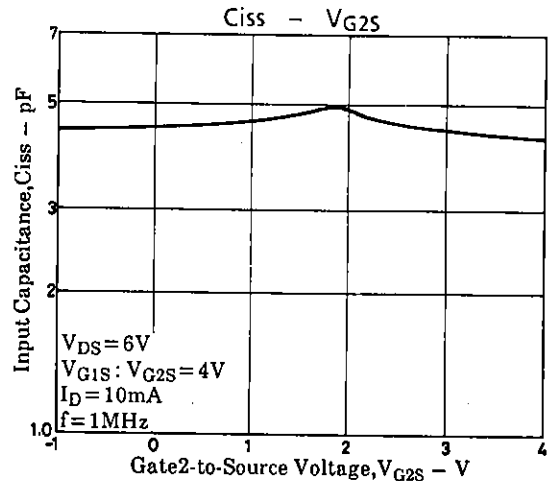
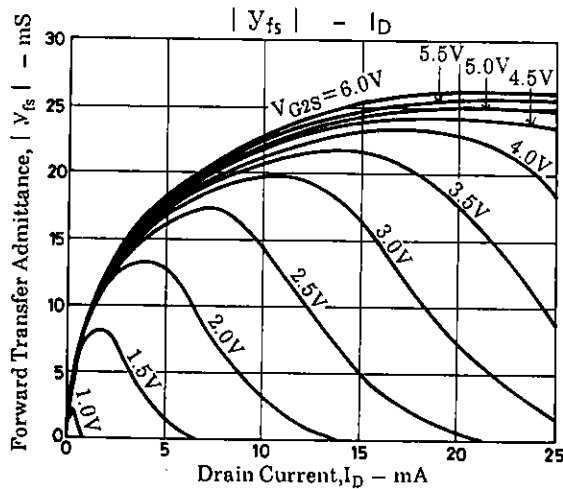
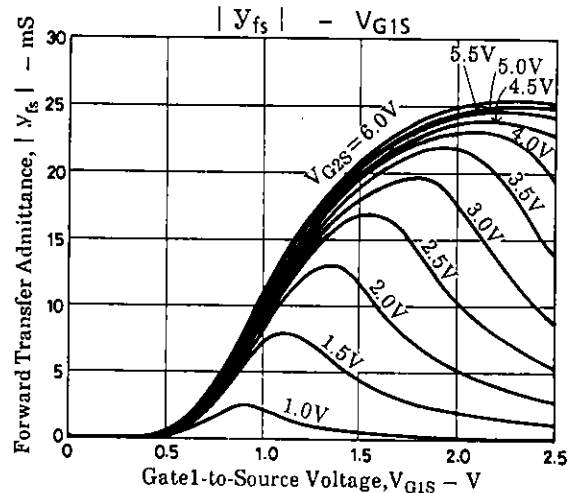
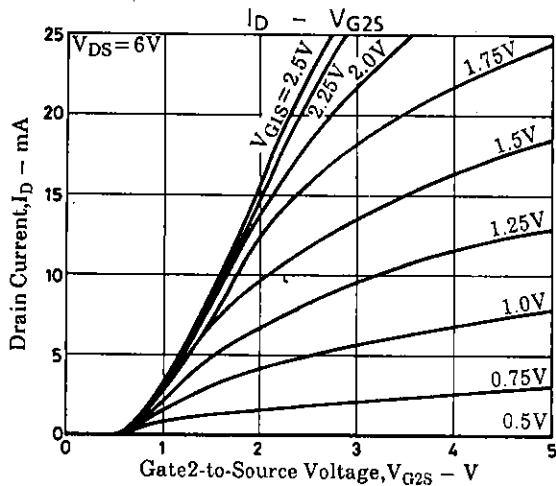
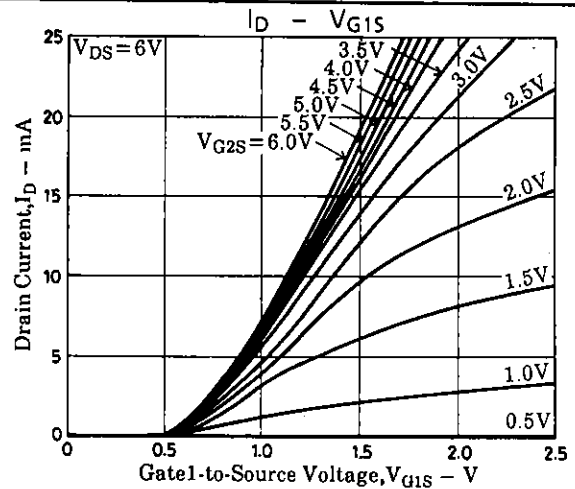
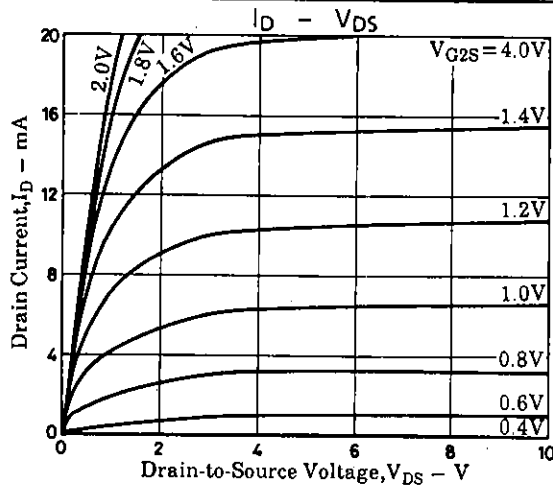


Package Dimensions 2096A (unit : mm)



SANYO : CP4

3SK265



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