



FM Tuner, VHF-Band Amplifier Applications

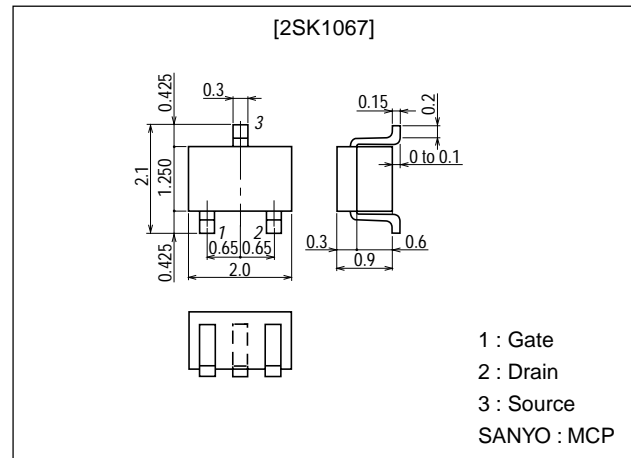
Features

- Low noise NF=1.8dB typ (f=100MHz).
- High power gain PG=27dB typ (f=100MHz).
- Small reverse transfer capacitance Crss=0.035pF (V_{DS}=10V, f=1MHz).
- Ultrasmall-sized package (MCP) permitting 2SK1067-applied sets to be made smaller and slimmer.

Package Dimensions

unit:mm

2057



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DS}		16	V
Gate-to-Source Voltage	V _{GS}		±5	V
Drain Current	I _D		30	mA
Allowable Power Dissipation	P _D		150	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 _{DSX}	V _{GS} =-4V, I _D =100μA	16			V
Gate-to-Source Leakage Current	I _{GSS}	V _{DS} =0V, V _{GS} =±5V			10	nA
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =10V, V _{GS} =0	1.2*		12.0*	mA
Cutoff Voltage	V _{GS(off)}	V _{DS} =10V, I _D =100μA			-2.5	V
Forward Transfer Admittance	y _{fs}	V _{DS} =10V, V _{GS} =0, f=1kHz		11		mS
Input Capacitance	C _{iss}	V _{DS} =10V, V _{GS} =0, f=1MHz		2.3		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} =10V, V _{GS} =0, f=1MHz		0.035		pF

* : The 2SK1067 is classified by I_{DSS} as follows (unit : mA) :

1.2	3	3.0	2.5	4	6.0	5.0	5	12.0
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(Note) Marking : CJ
I_{DSS} rank : 3, 4, 5

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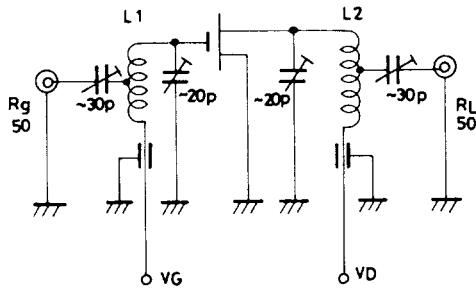
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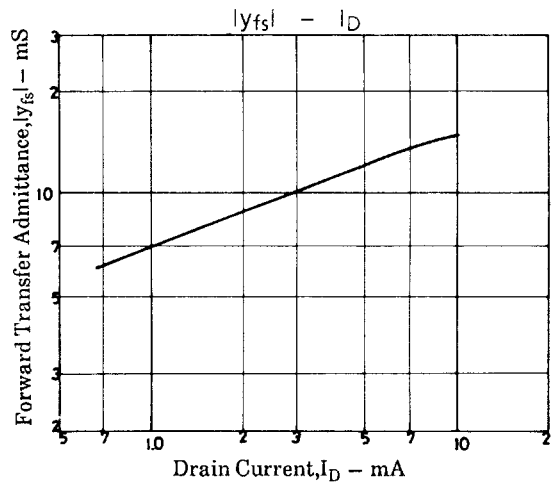
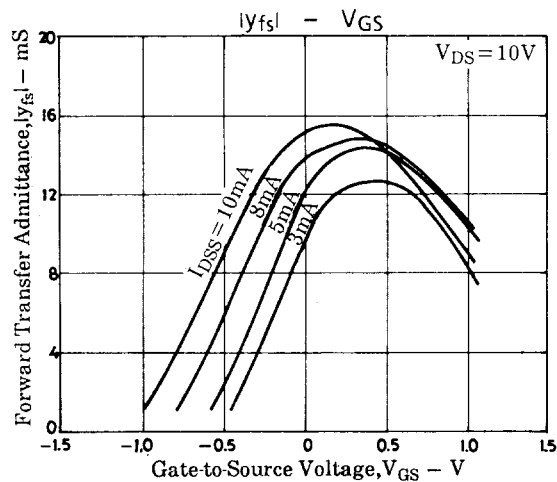
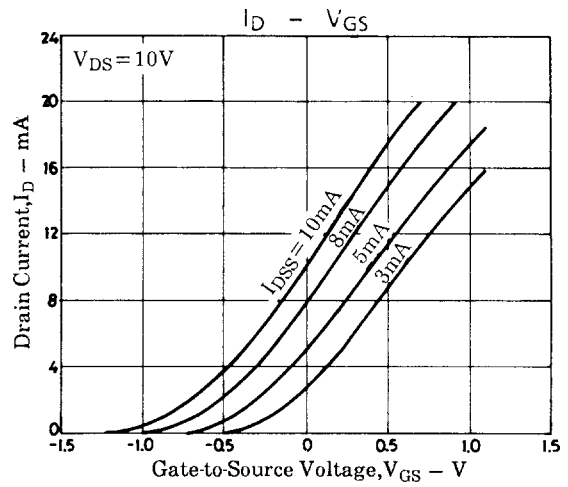
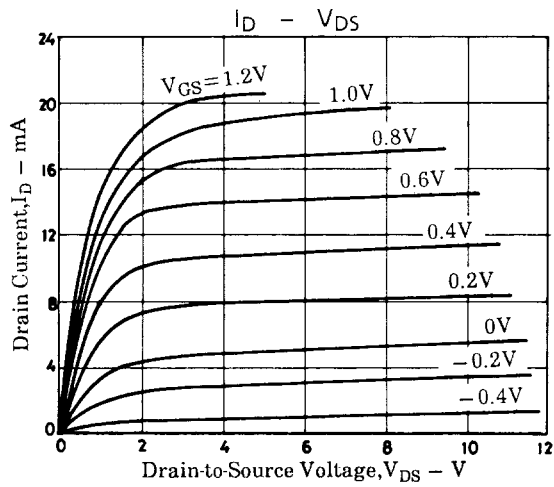
Parameter	Symbol	Conditions	Ratings		Unit
Power Gain	PG	$V_{DS}=10V, V_{GS}=0, f=100MHz,$ See specified Test Circuit	27		dB
Noise Figure	NF	$V_{DS}=10V, V_{GS}=0, f=100MHz,$ See specified Test Circuit	1.8	3.0	dB

PG, NF Specified Test Circuit

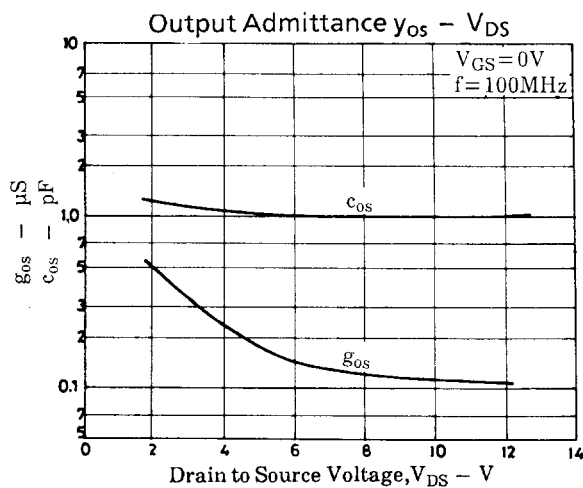
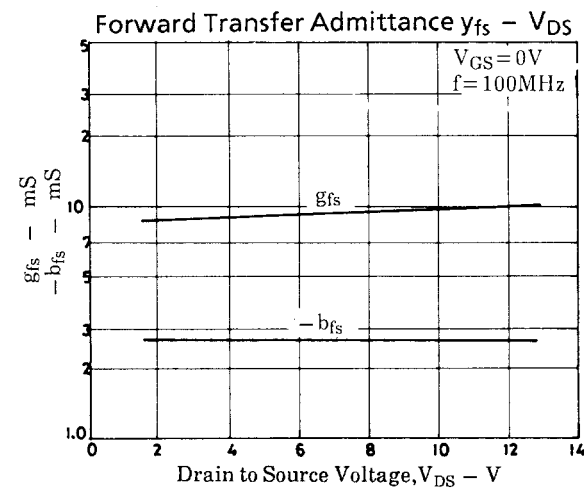
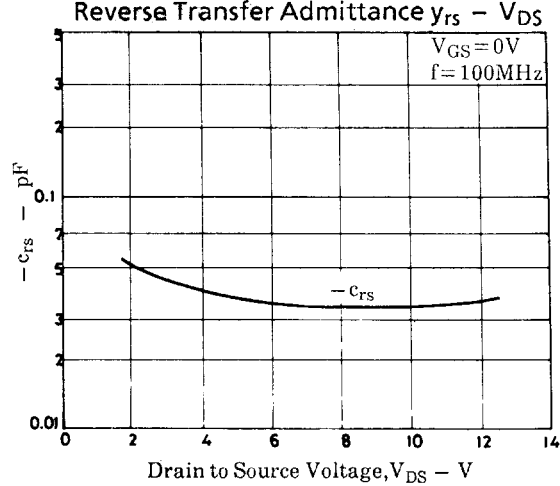
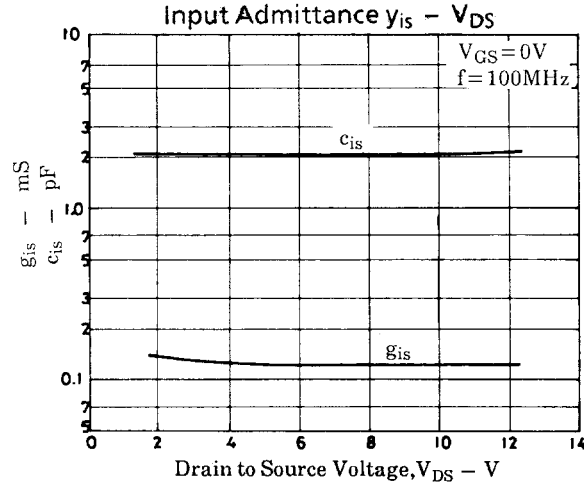
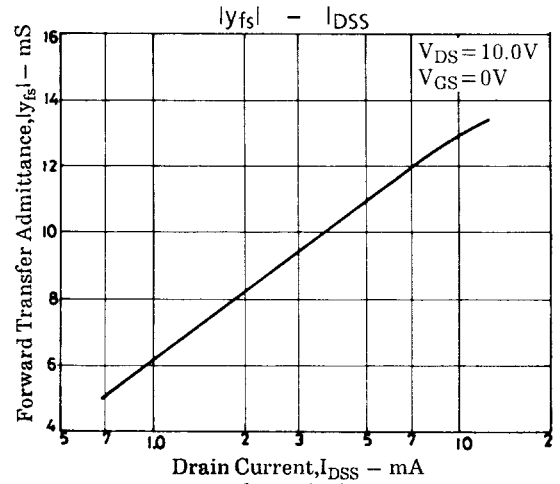
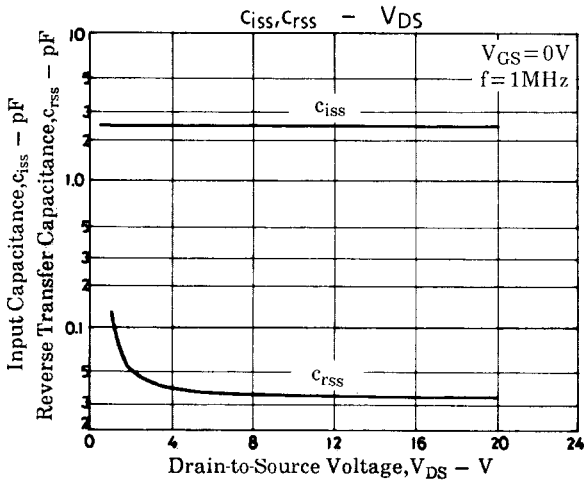
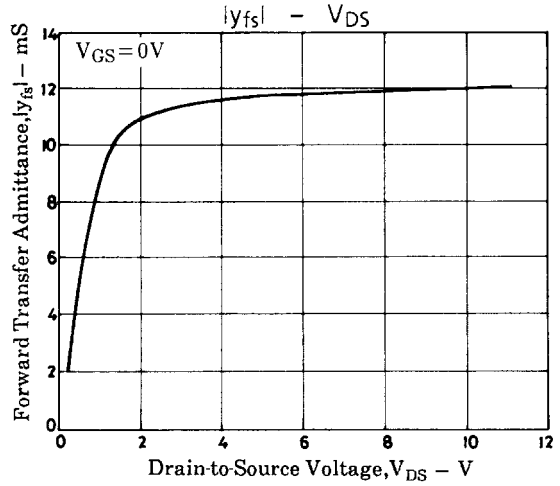
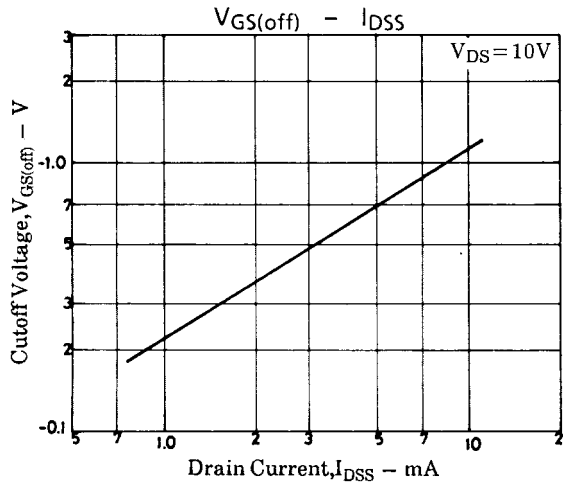


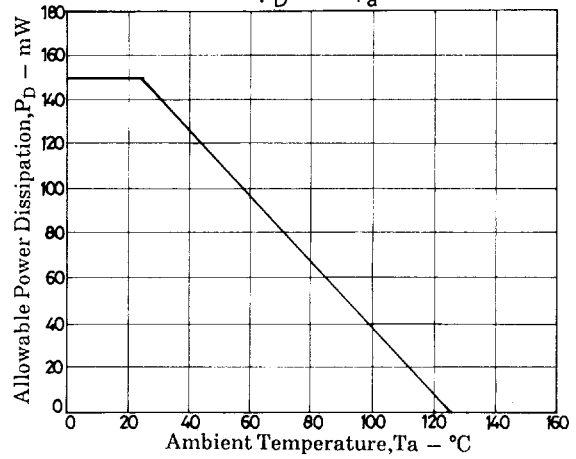
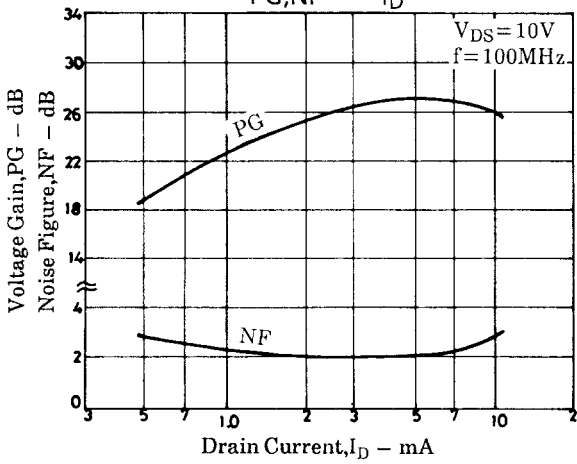
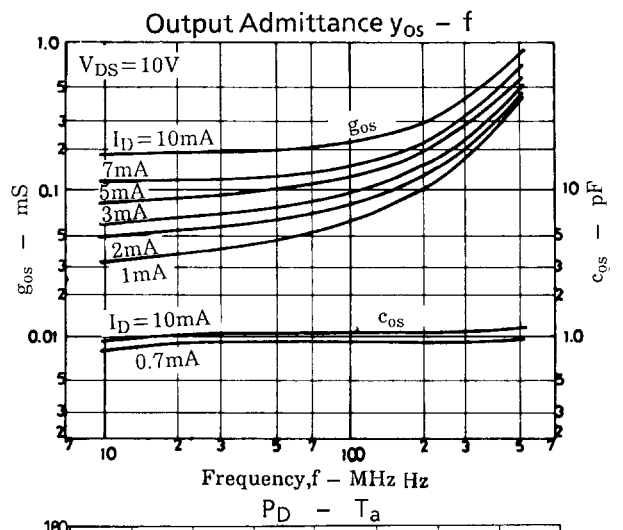
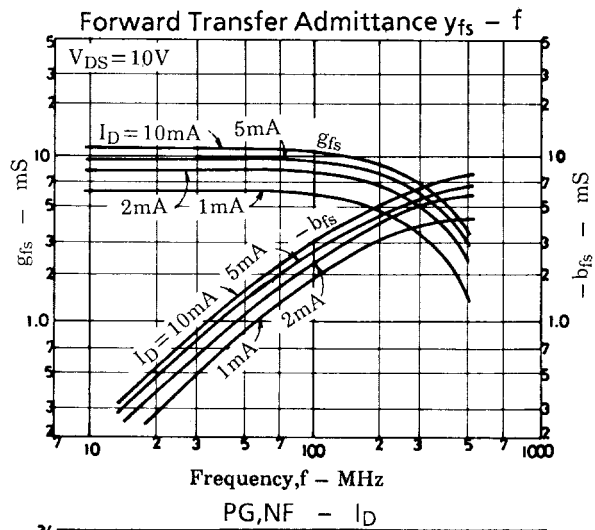
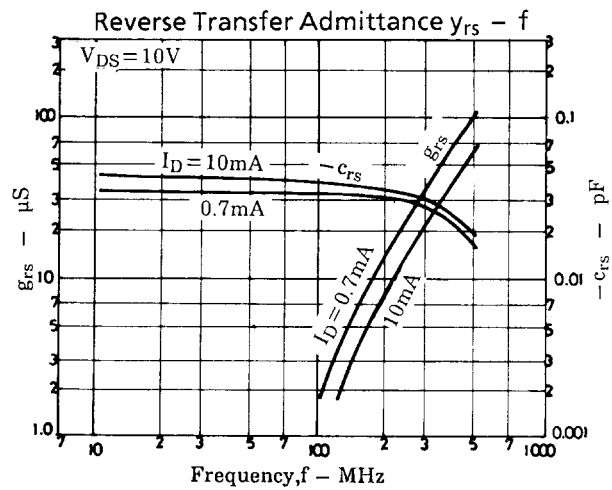
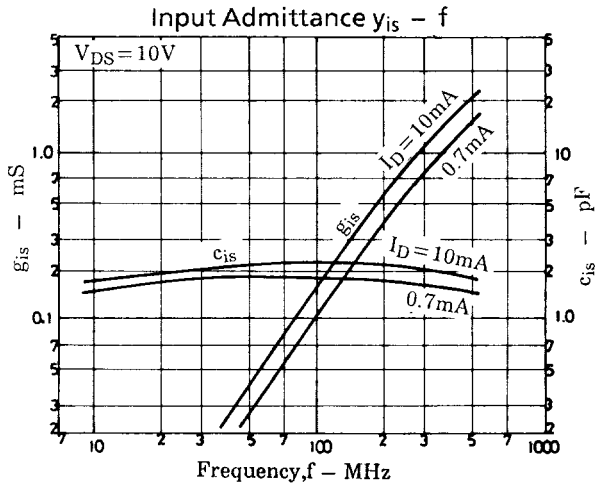
- L1 : 1.0mm \varnothing plated wire, 10mm \varnothing 6T, tap : 3T from H side
- L2 : 1.0mm \varnothing plated wire, 10mm \varnothing 7T, tap : 4T from H side

Unit (resistance : Ω , capacitance : F)



2SK1067





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