

**2SK1065**

High-Frequency General-Purpose Amplifier Applications

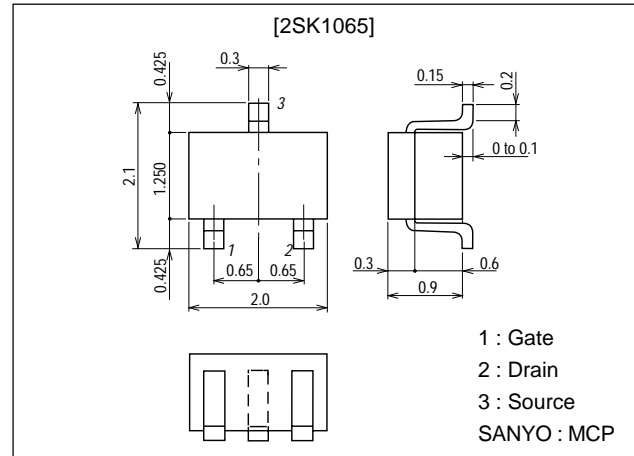
Features

- Ultrasmall package facilitates miniaturization in end products.
- Small Crss (Crss=0.04pF typ).

Package Dimensions

unit:mm

2057A



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		150	mW
Junction Temperature	T _J		150	°C
Storage Temperature	T _{stg}		-55 to +150	°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} =0			-10	nA
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =5V, V _{GS} =0	1.2*		12.0*	mA
Cutoff Voltage	V _{GS(off)}	V _{DS} =5V, I _D =10μA	-0.4	-1.3	-2.5	V
Forward Transfer Admittance	y _{fs} ₁	V _{DS} =5V, V _{GS} =0, f=1kHz	2.4	6.0		mS
	y _{fs} ₂	V _{DS} =5V, V _{GS} =0, f=100MHz	2.4	6.0		mS

* : The 2SK1065 is classified by I_{DSS} as follows (unit : mA) :

Continued on next page.

I _{DSS} rank	3	4	5
I _{DSS}	1.2 to 3.0	2.5 to 6.0	5.0 to 12.0

(Note) Marking : T

- For CP package version, use the 2SK242.

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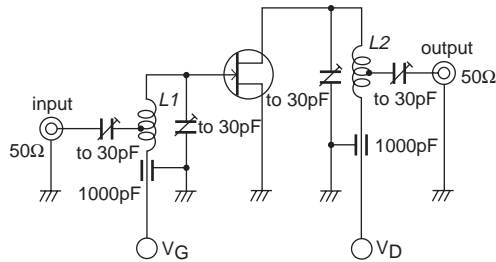
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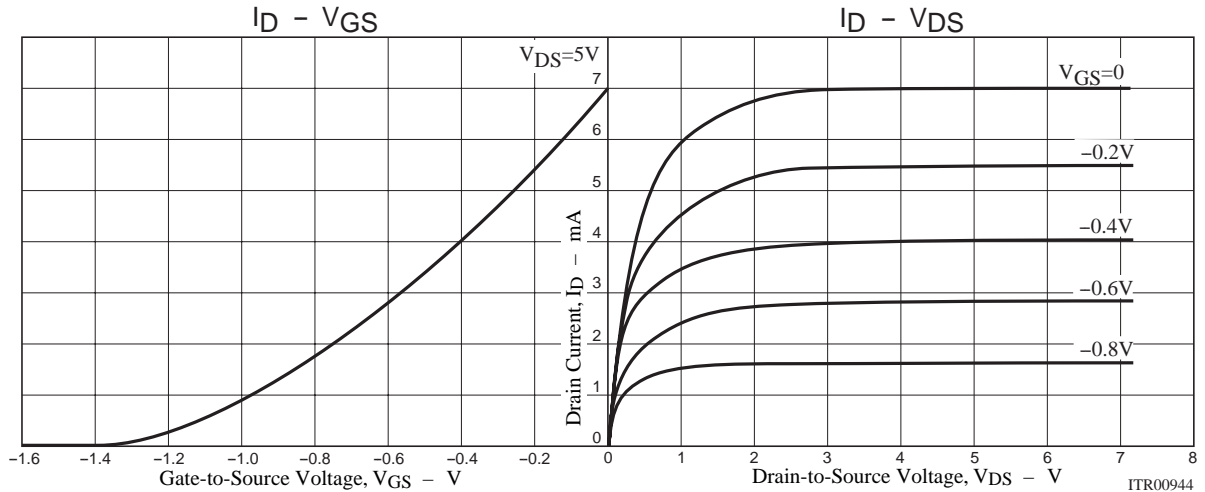
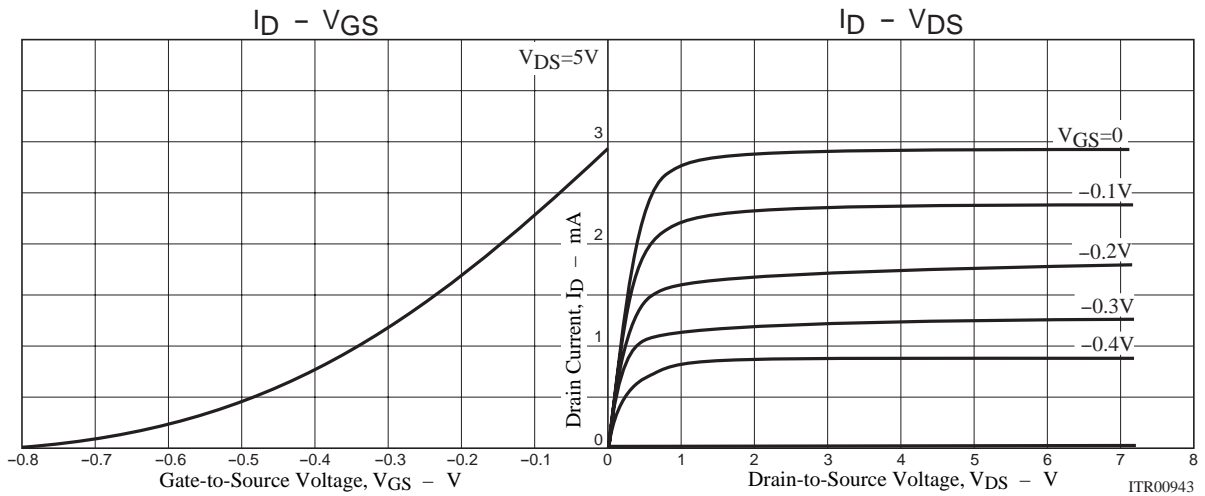
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Parameter	Symbol	Conditions	Ratings		Unit
Input Capacitance	Ciss	$V_{DS}=5V, V_{GS}=0, f=1MHz$	4.0		pF
Reverse Transfer Capacitance	Crss	$V_{DS}=5V, V_{GS}=0, f=1MHz$	0.04	0.15	pF
Output Capacitance	Coss	$V_{DS}=5V, V_{GS}=0, f=1MHz$	4.0		pF
Power Gain	PG	$V_{DS}=5V, V_{GS}=0, f=100MHz$, See specified Test Circuit	24		dB
Noise Figure	NF	See specified Test Circuit	3.5	6.0	dB

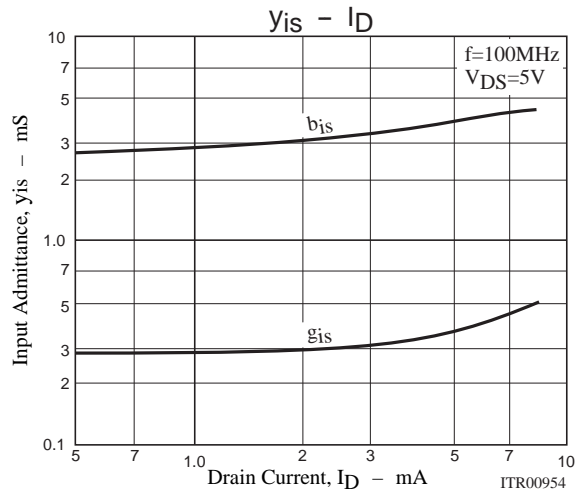
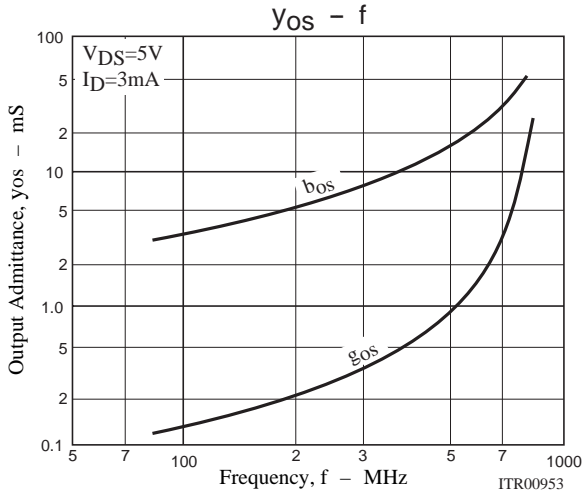
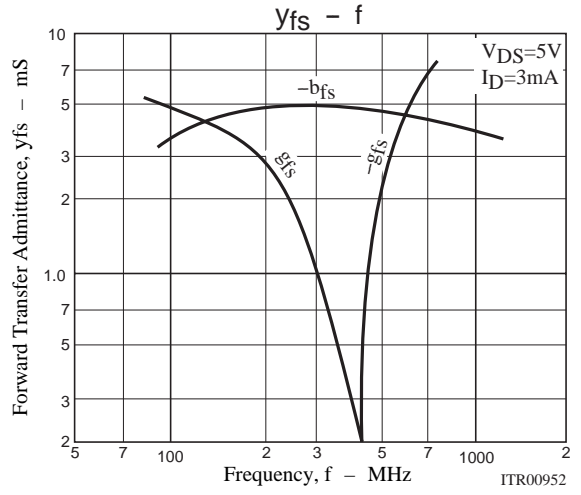
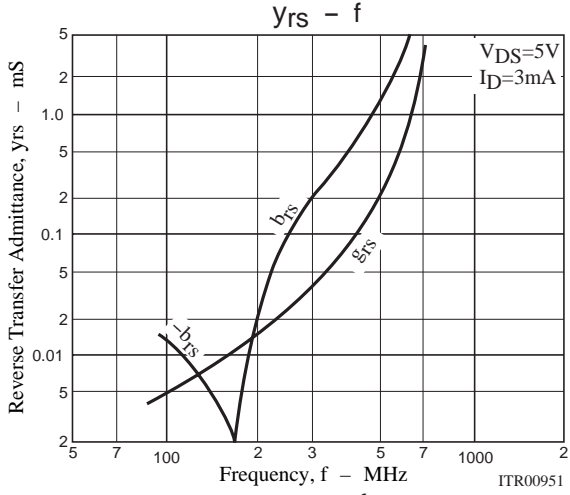
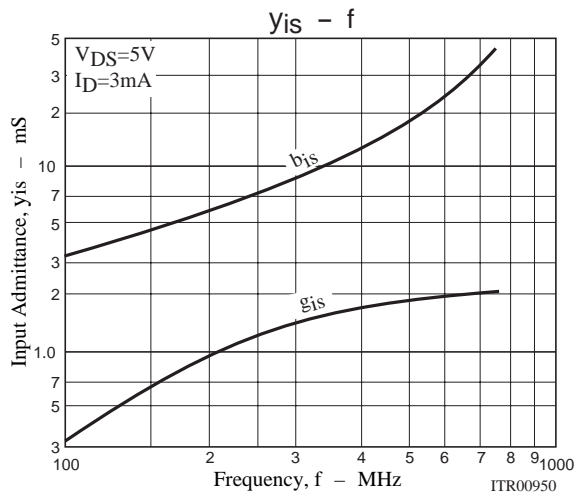
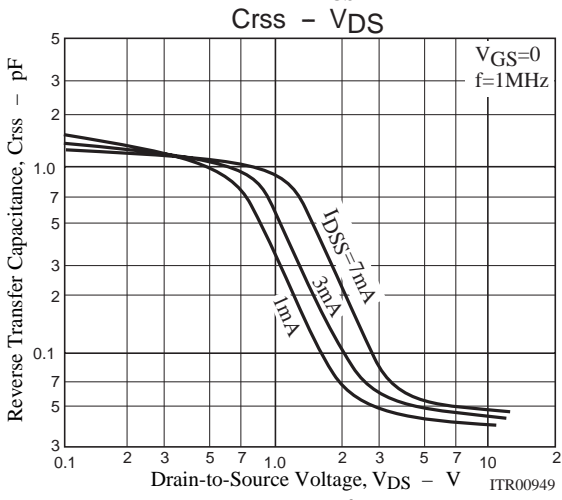
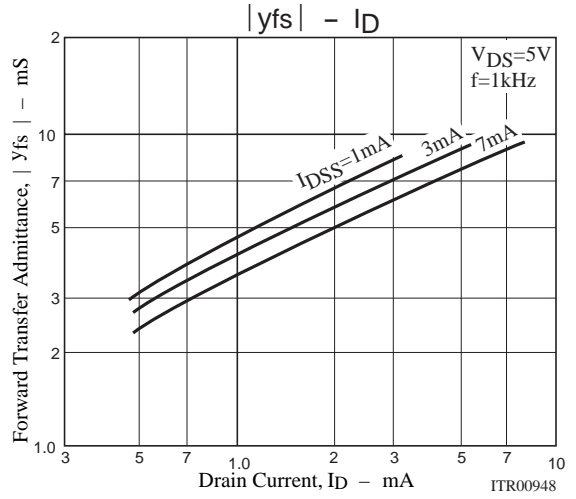
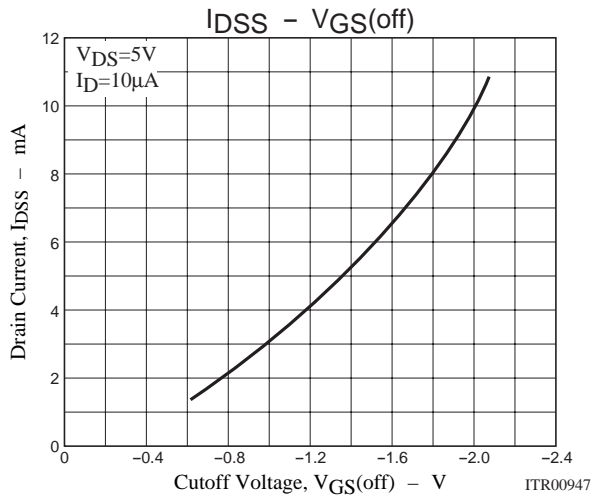
PG and NF Test Circuit



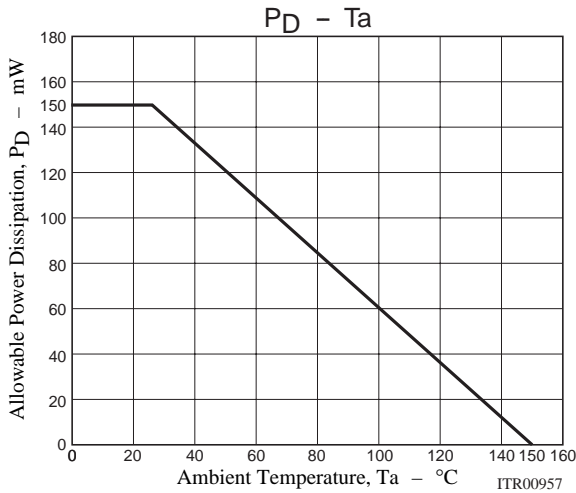
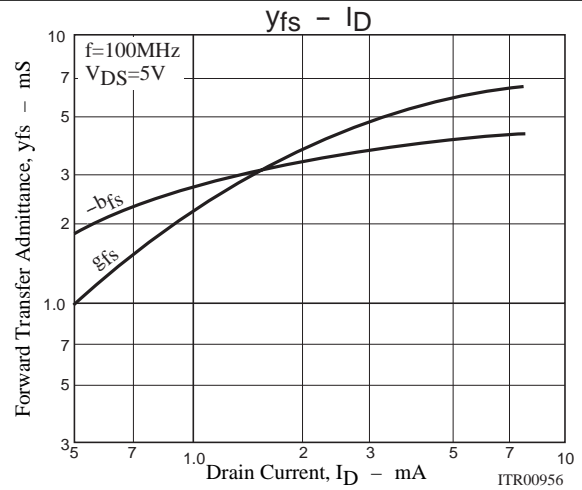
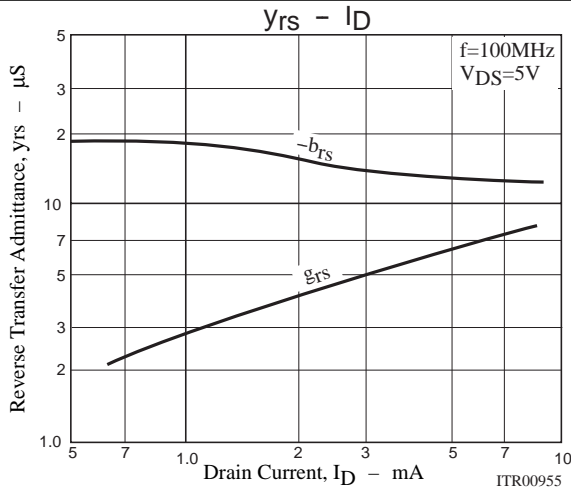
L1 : 1mm ϕ plated wire, 10mm ϕ 4T 18mm pitch,
tapped at 1T from gate side
L2 : 1mm ϕ plated wire, 10mm ϕ 6T 10mm pitch,
tapped at 1T from gate side



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