N-Channel Junction Silicon FET

2SK1065



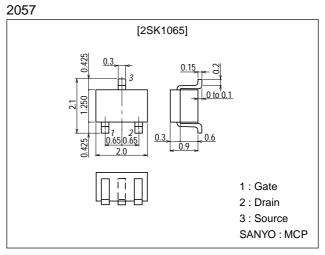
# **High-Frequency General-Purpose Amplifier Applications**

### Features

· Ultrasmall-sized package permitting 2SK1065applied sets to be made smaller and slimmer. · Small Crss (Crss=0.04pF typ).

## **Package Dimensions**

unit:mm



# Specifications

#### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Gate-to-Drain Voltage	V <sub>GDO</sub>		-20	V
Gate Current	IG		10	mA
Drain Current	۱ <sub>D</sub>		20	mA
Allowable Power Dissipation	PD		150	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

#### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions		Unit		
Falameter		Conditions		typ	max	Unit
Gate-to-Drain Breakdown Voltage	V(BR)GDO	I <sub>G</sub> =-10µA	-20			V
Gate-to-Source Leakage Current	IGSS	V <sub>GS</sub> =-0.5V, V <sub>DS</sub> =0			-10	nA
Zero-Gate Voltage Drain Current	IDSS	V <sub>DS</sub> =5V, V <sub>GS</sub> =0	1.2*		12.0*	mA
Cutoff Voltage	VGS(off)	$V_{DS}=5V, I_{D}=10\mu A$	-0.4	-1.3	-2.5	V
Forward Transfer Admittance	yfs  1	V <sub>DS</sub> =5V, V <sub>GS</sub> =0, f=1kHz	2.4	6.0		mS
	yfs  2	V <sub>DS</sub> =5V, V <sub>GS</sub> =0, f=100MHz	2.4	6.0		mS

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

1.2	3	3.0	2.5	4	6.0	5.0	5	12.0

(Note) Marking : T

I<sub>DSS</sub> rank : 3, 4, 5 • For CP package version, use the 2SK242.

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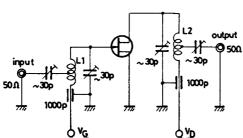
#### SANYO Electric Co., Ltd. Semiconductor Company TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

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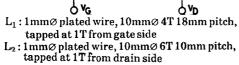
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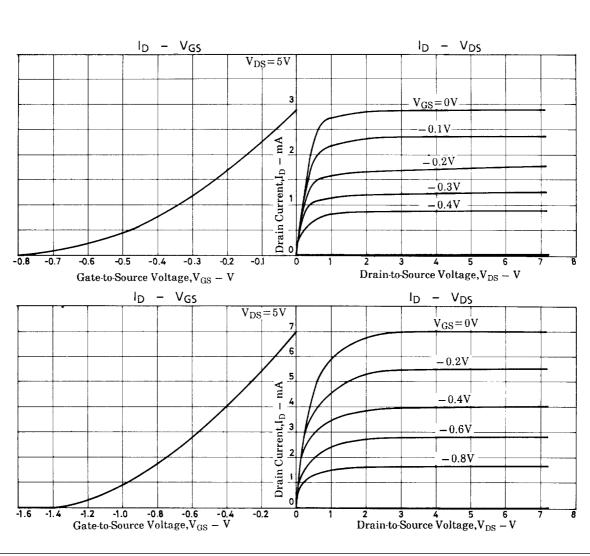
Parameter	Symbol	Conditions	Ratings			Unit
Input Capacitance	Ciss	V <sub>DS</sub> =5V, V <sub>GS</sub> =0, f=1MHz		4.0		pF
Reverse Transfer Capacitance	Crss	V <sub>DS</sub> =5V, V <sub>GS</sub> =0, f=1MHz		0.04	0.15	pF
Output Capacitance	Coss	V <sub>DS</sub> =5V, V <sub>GS</sub> =0, f=1MHz		4.0		pF
Power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

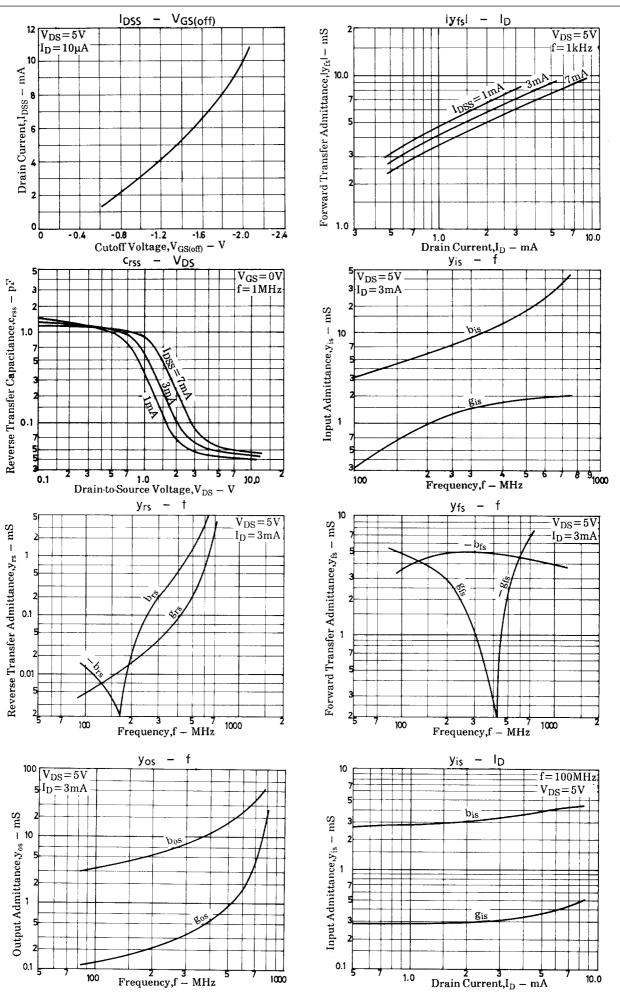
#### PG, NF Specified Test Circuit

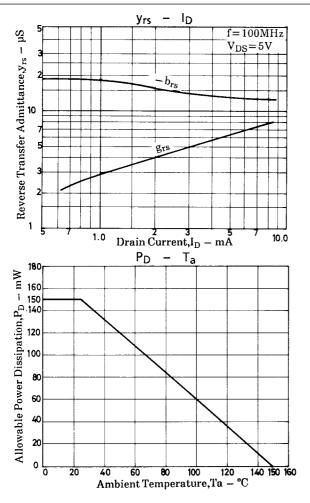


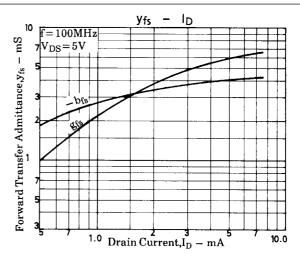
Unit (capacitance : F)











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