

Ordering number:EN2841

N-Channel Junction Silicon FET



2SK932

High-Frequency Low-Noise Amplifier Applications

Applications

- AM tuner RF amplifier, low-noise amplifier.

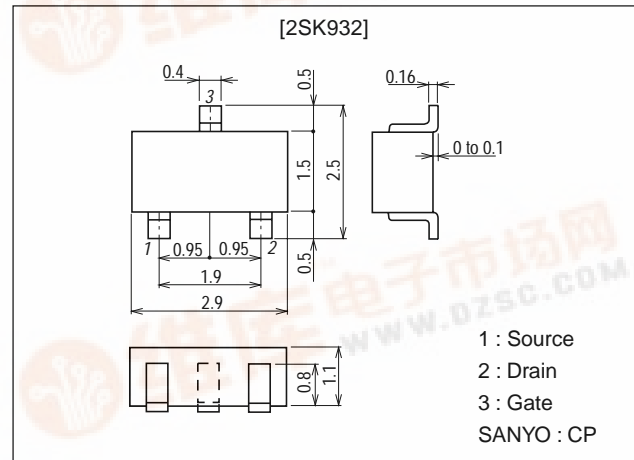
Features

- Adoption of FBET process.
- Large $|y_{fs}|$.
- Small Ciss.
- Ultralow noise figure.
- Ultrasmall-sized package permitting 2SK932-applied sets to be made smaller and slimmer.

Package Dimensions

unit:mm

2050A



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSX}		15	V
Gate-to-Drain Voltage	V_{GDS}		-15	V
Gate Current	I_G		10	mA
Drain Current	I_D		50	mA
Allowable Power Dissipation	P_D		200	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	$V_{(BR)GDS}$	$I_G = -10\mu A, V_{DS} = 0V$	-15			V
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = -10V, V_{DS} = 0V$			-1.0	nA
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 5V, V_{GS} = 0V$	5.0*		24.0*	mA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 5V, I_D = 100\mu A$	-0.2	-0.6	-1.4	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = 5V, V_{GS} = 0V, f = 1kHz$	25	50		mS

* : The 2SK932 is classified by I_{DSS} as follows (unit : mA) :

5.0	21	8.5	7.3	22	12.0	10.0	23	17.0	14.5	24	24.0
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(Note) Marking : E

I_{DSS} rank : 21, 22, 23, 24

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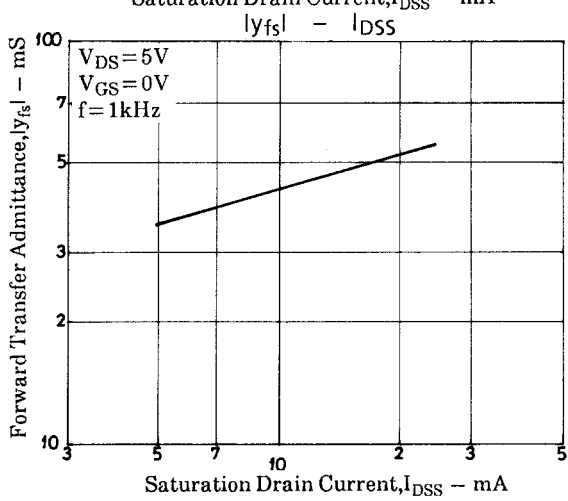
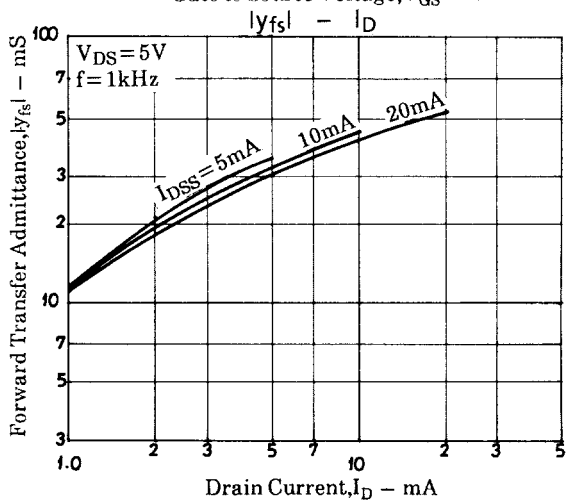
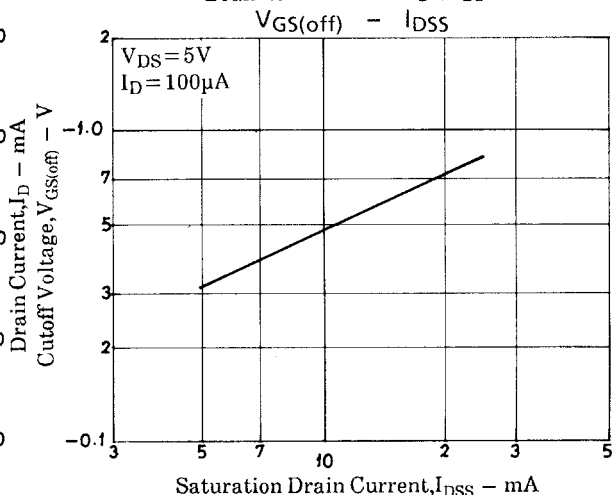
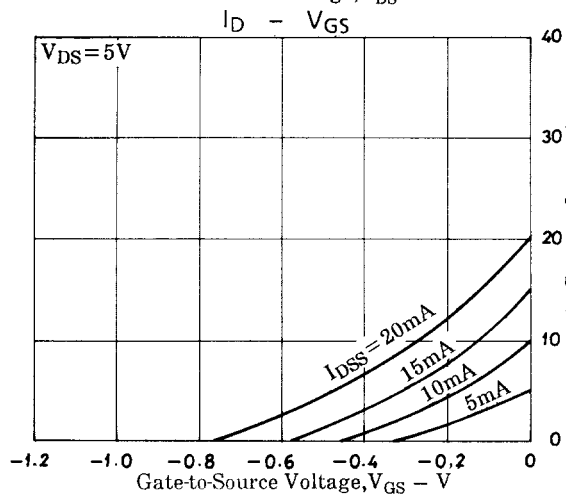
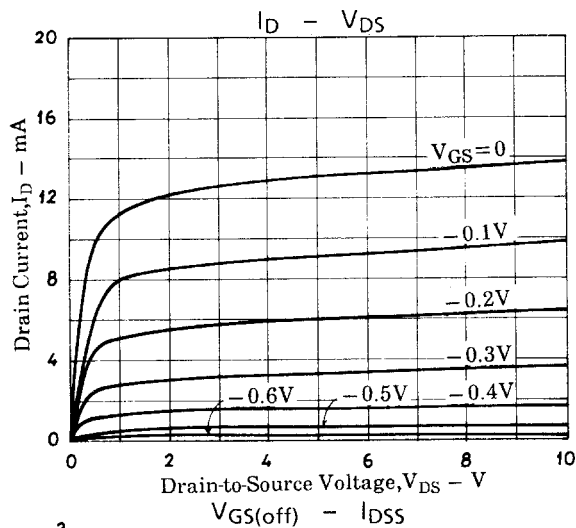
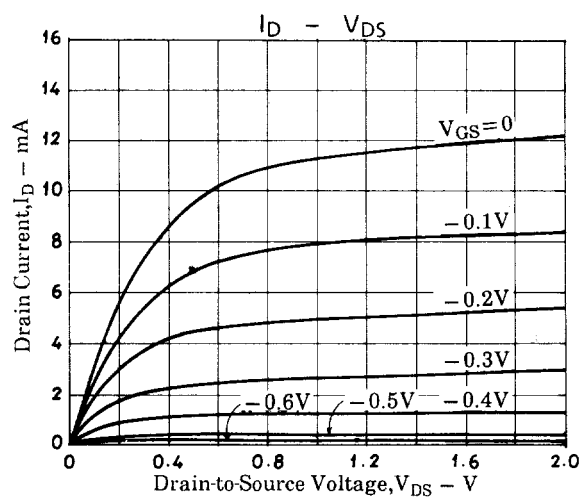
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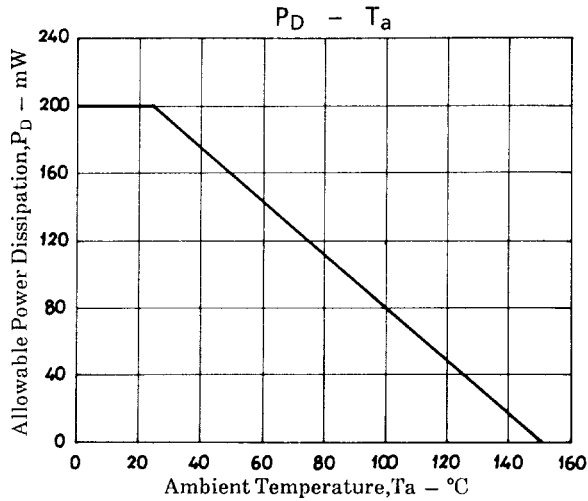
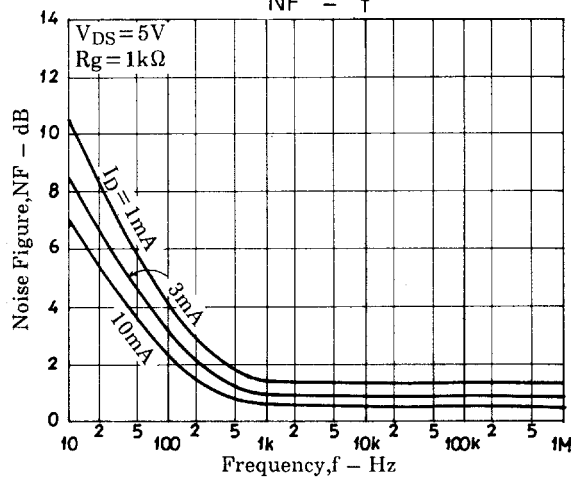
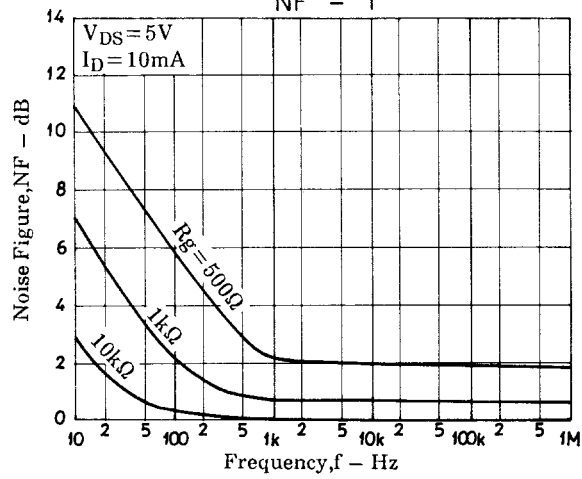
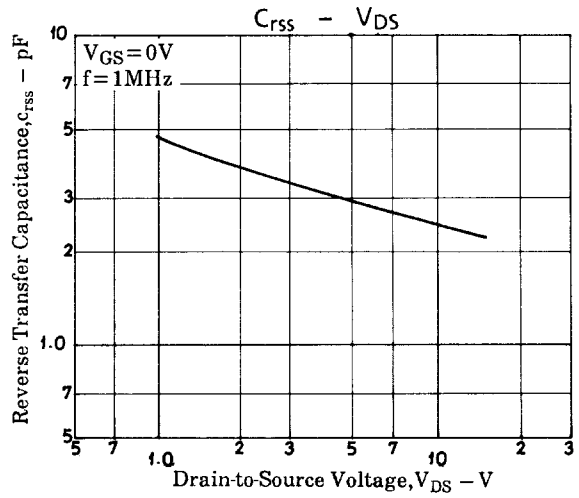
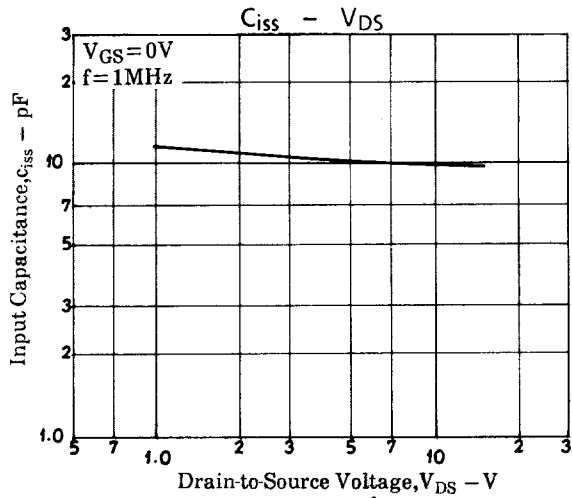
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Parameter	Symbol	Conditions	Ratings	Unit
Input Capacitance	C_{iss}	$V_{DS}=5V, V_{GS}=0V, f=1MHz$	10	pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=5V, V_{GS}=0V, f=1MHz$	3.0	pF
Noise Figure	NF	$V_{DS}=5V, R_g=1k\Omega, I_D=1mA, f=1kHz$	1.5	dB



2SK932



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