Ordering number: EN 4840

SANYO

No.4840

2SK2395

N-Channel Junction Silicon FET

Low-Noise HF Amp Applications

Applications

- AM tuner RF amp.
- Low-noise amp.

Features

- Large $|y_{fs}|$.
- Small Ciss.
- Very low noise figure.

Absolute Maximum Ratings at Ta = 25°C

			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	300	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55 to +150	°C

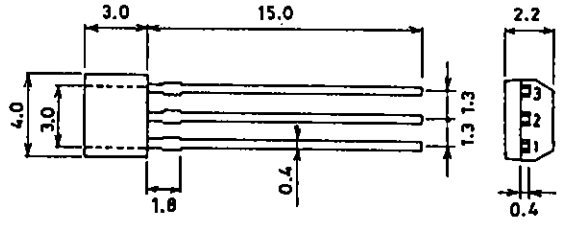
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
G-D Breakdown Voltage	$V_{(BR)GDS}$	$I_G = -10\mu A, V_{DS} = 0$	−15			V
Gate Cutoff Current	I_{GSS}	$V_{GS} = -10V, V_{DS} = 0$			−1.0	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 5V, I_D = 100\mu A$	−0.3	−0.7	−1.5	V
Drain Current	I_{DSS}	$V_{DS} = 5V, V_{GS} = 0$	6.0※		32.0※	mA
Forward Transfer Admittance	$\|y_{fs}\|$	$V_{DS} = 5V, V_{GS} = 0, f = 1kHz$	20	38		mS
Input Capacitance	Ciss	$V_{DS} = 5V, V_{GS} = 0, f = 1MHz$		10.2		pF
Reverse Transfer Capacitance	Crss	$V_{DS} = 5V, V_{GS} = 0, f = 1MHz$		3.1		pF
Noise Figure	NF	$V_{DS} = 5V, Rg = 1k\Omega, I_D = 1mA$ f = 1kHz		1.0		dB

※ : The 2SK2395 is classified by I_{DSS} as follows : (unit : mA)

6.0 F 12.0	10.0 G 20.0	16.0 H 32.0

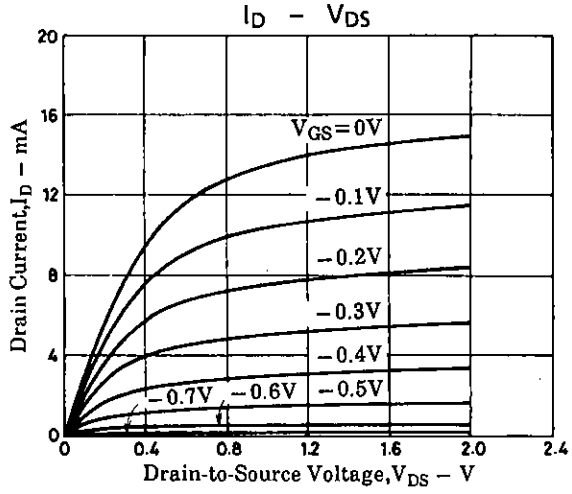
Package Dimensions 2034A
(unit: mm)



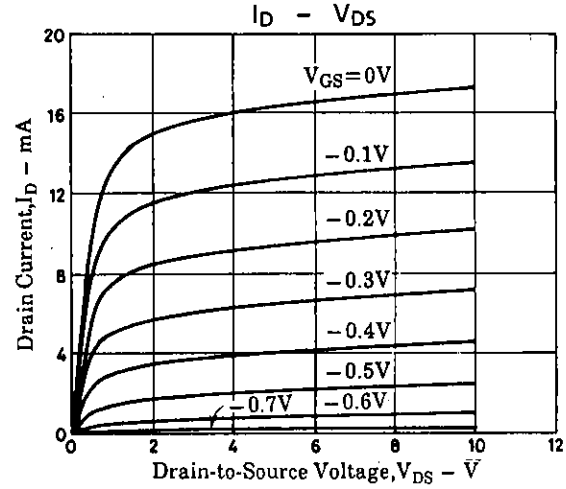
1 : Source
2 : Gate
3 : Drain
SANYO : SPA

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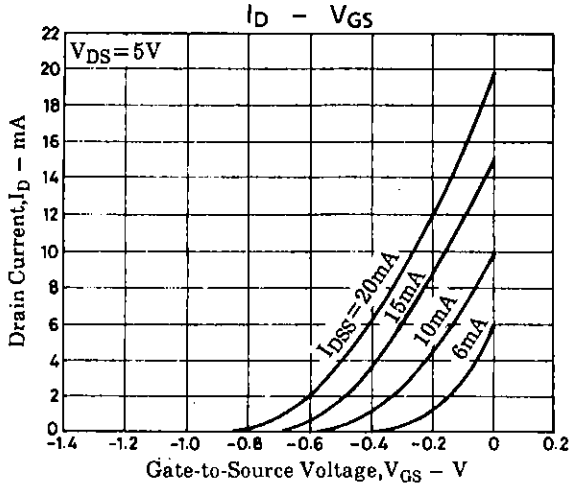
I_D – V_{DS}



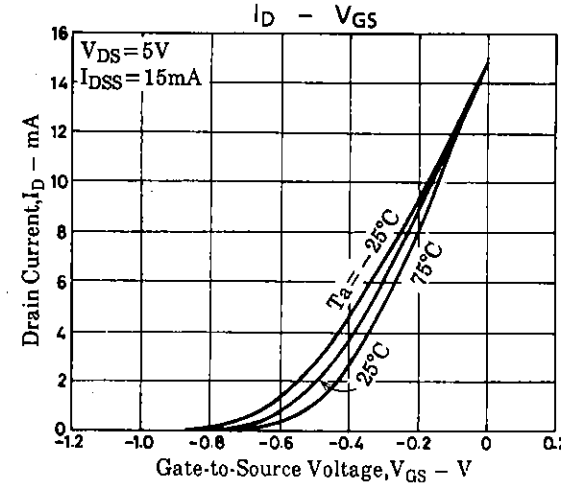
I_D – V_{DS}



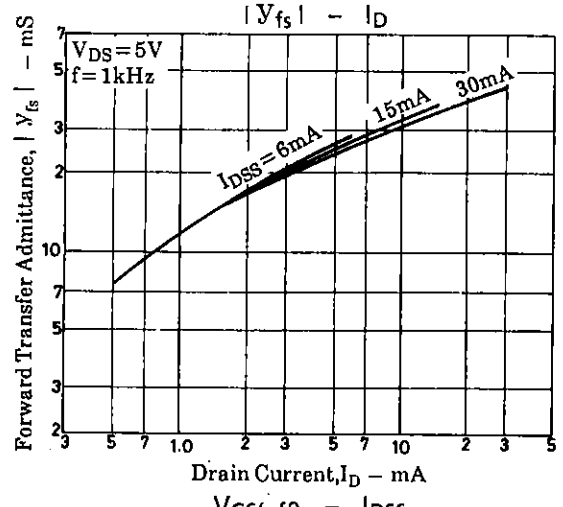
I_D – V_{GS}



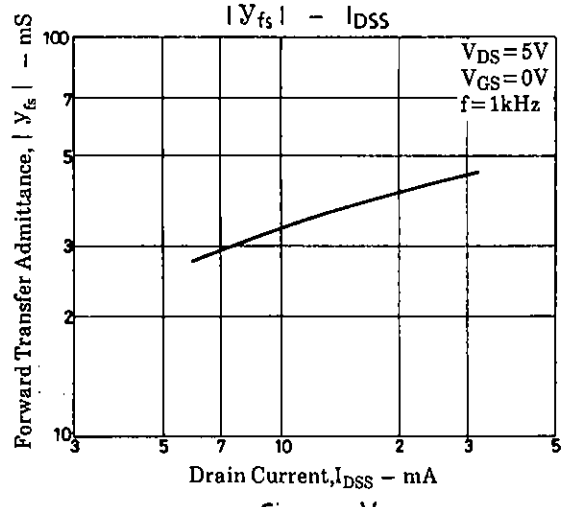
I_D – V_{GS}



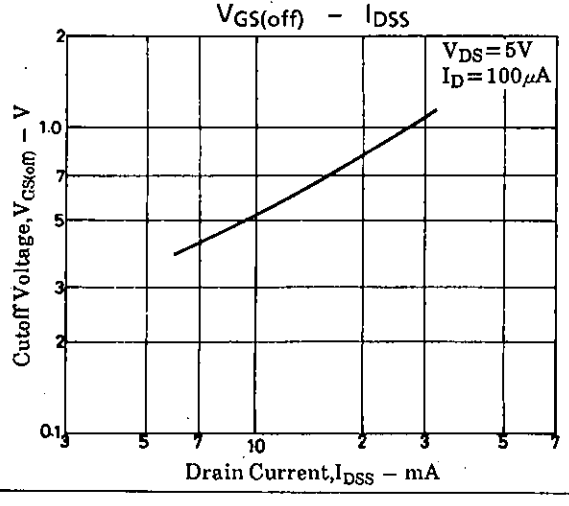
$|y_{fs}|$ – I_D



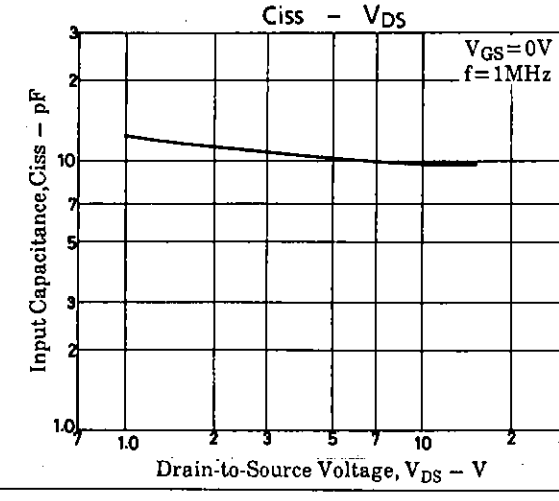
$|y_{fs}|$ – I_{DSS}

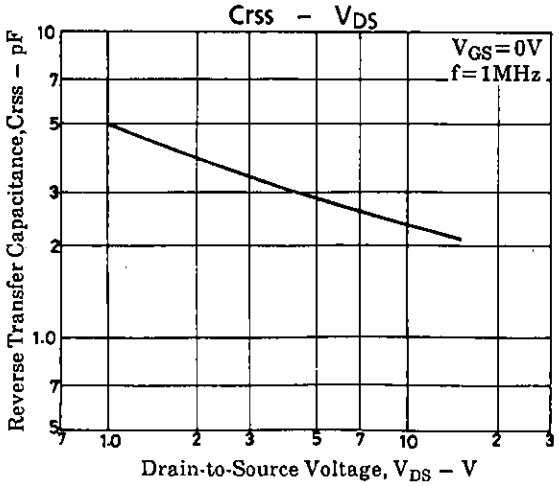


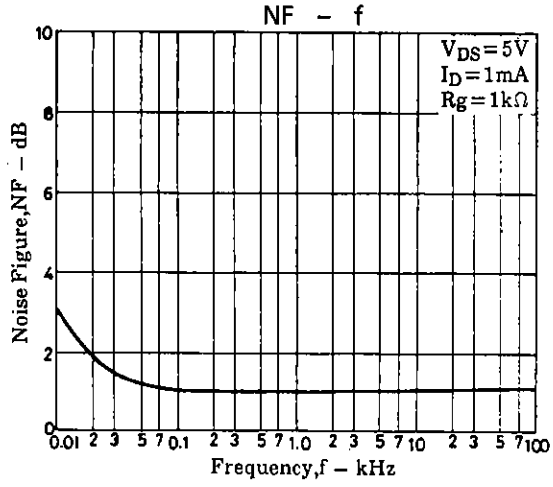
$V_{GS(off)}$ – I_{DSS}

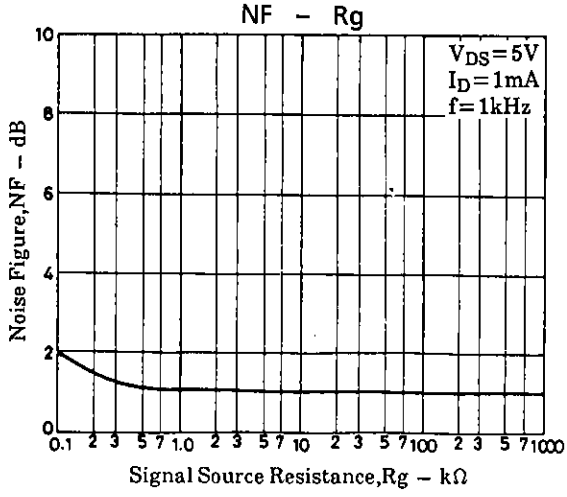


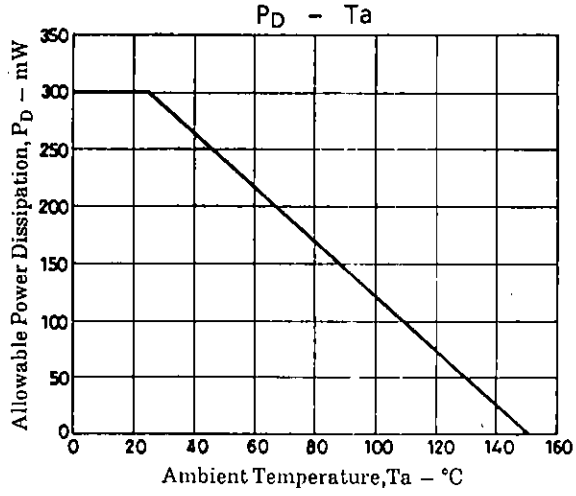
Ciss – V_{DS}











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