Ordering number : EN4114

No.4114

2SK1806

N-Channel Junction Silicon FET

Low-Frequency General-Purpose Amp Applications Impedance conversion

Features

- Low frequency amplifiers, impedance conversion, ideal for potentiometers, analog switches, and constant current supplies.

Absolute Maximum Ratings at Ta = 25°C

			unit
Drain to Source Voltage	V_{DSX}	30	V
Gate to Drain Voltage	V_{GDS}	−30	V
Gate Current	I_G	10	mA
Drain Current	I_D	20	mA
Allowable Power Dissipation	P_D	250	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55 to +150	°C

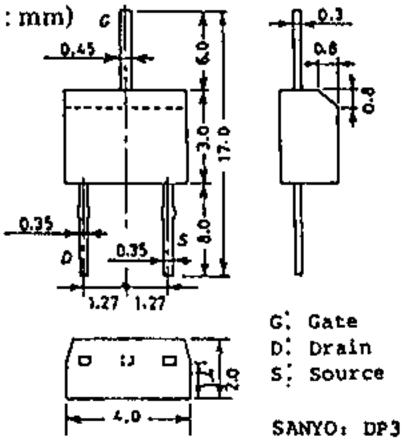
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
G-D Breakdown Voltage	$V_{(BR)GDS}$	$I_G = -10\mu A, V_{DS} = 0$	−30			V
Gate to Source Leakage Current	I_{GSS}	$V_{GS} = -20V, V_{DS} = 0$			−1.0	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1\mu A$	−0.2	−0.7	−2.5	V
Drain Current	I_{DSS}	$V_{DS} = 10V, V_{GS} = 0$	0.6※		6.0※	mA
Forward Transfer Admittance	$\mid y_{fs} \mid$	$V_{DS} = 10V, V_{GS} = 0, f = 1kHz$	2.5	5.0		mS
Input Capacitance	Ciss	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		5.0		pF
Reverse Transfer Capacitance	Crss	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		1.5		pF
Static Drain to Source on State Resistance	$R_{DS(on)}$	$V_{DS} = 10mV, V_{GS} = 0$		250		Ω

※ : The 2SK1806 is classified by I_{DSS} as follows (unit : mA)

0.6	C	1.5	1.2	D	3.0	2.5	E	6.0

Package Dimensions 2026
(unit : mm)



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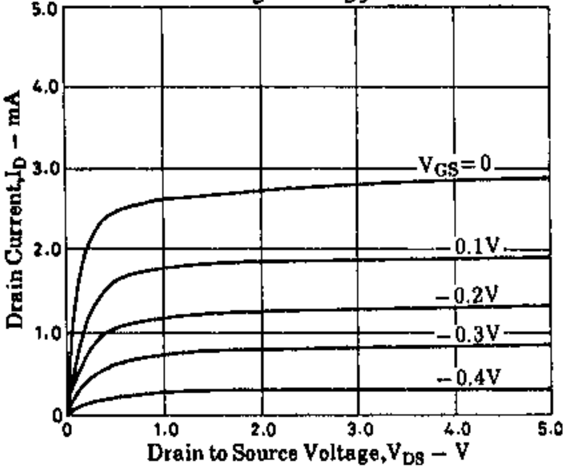
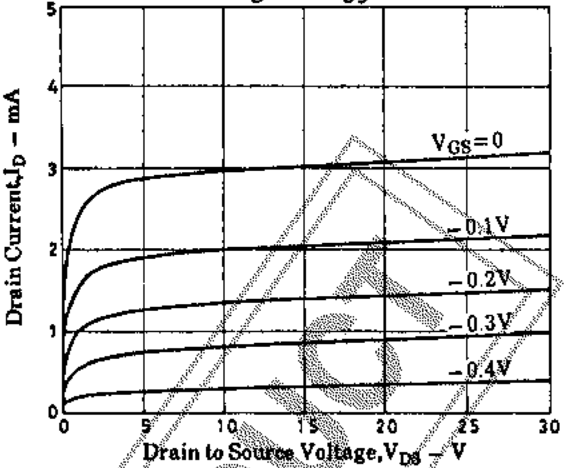
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

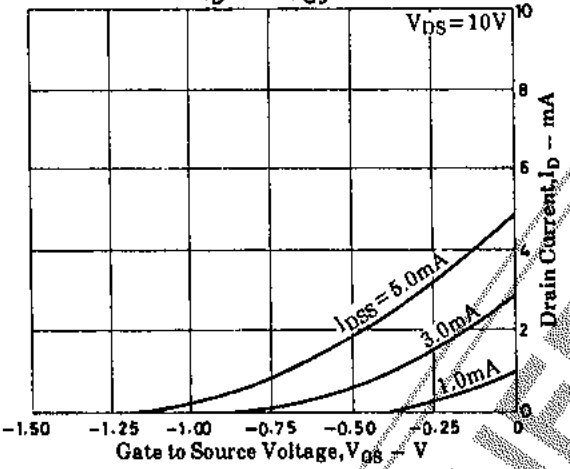
I_D – V_{DS}



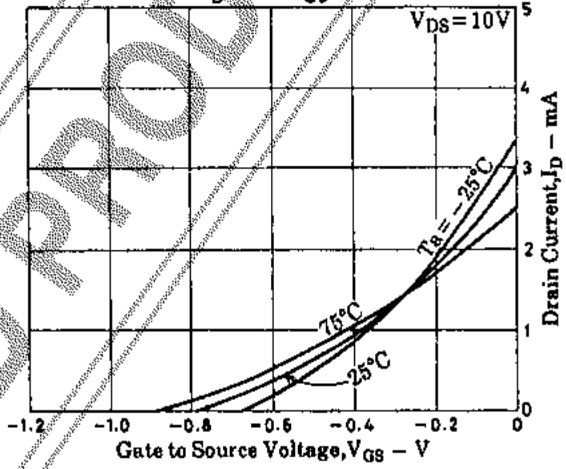
I_D – V_{DS}



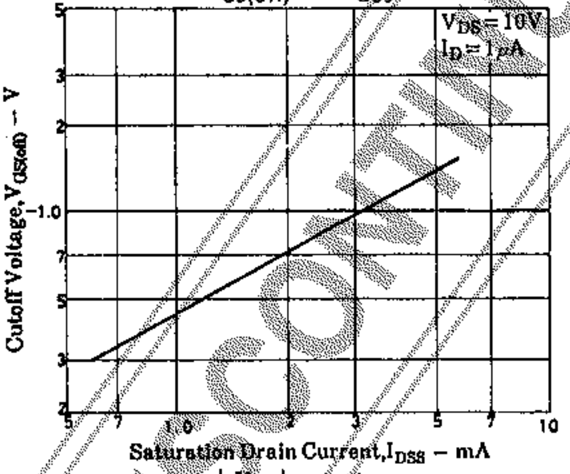
I_D – V_{GS}



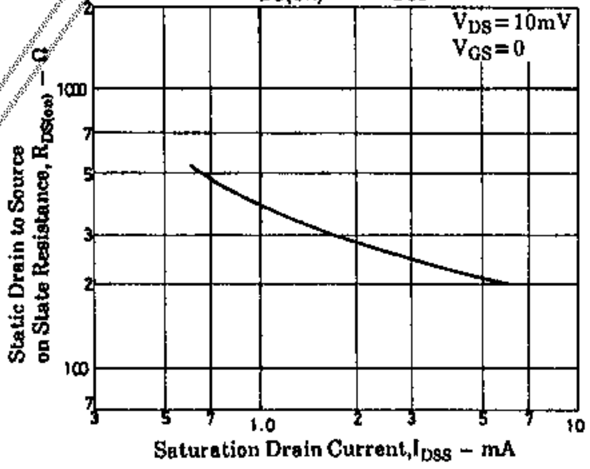
I_D – V_{GS}



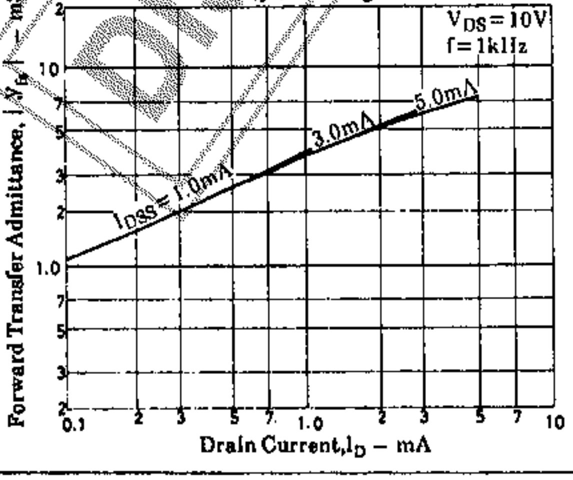
$V_{GS(off)}$ – I_{DSS}



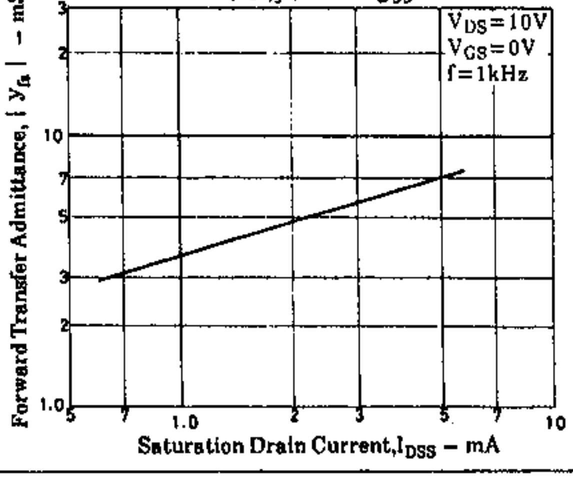
$R_{DS(on)}$ – I_{DSS}



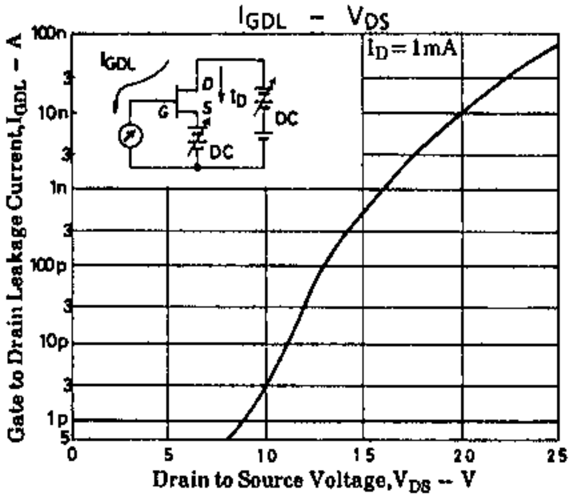
| y_{fs} | – I_D



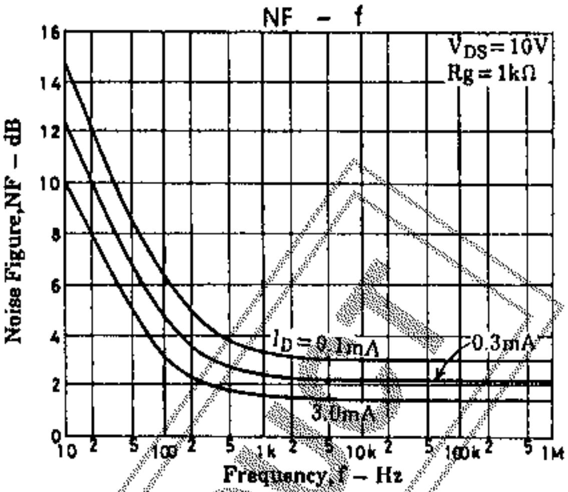
| y_{fs} | – I_{DSS}



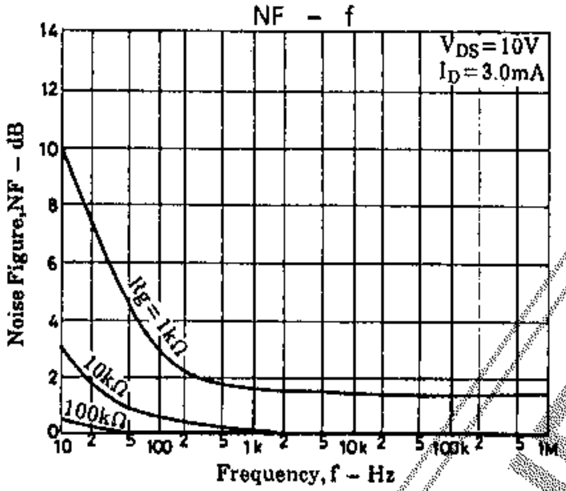
I_{GDL} – V_{DS}



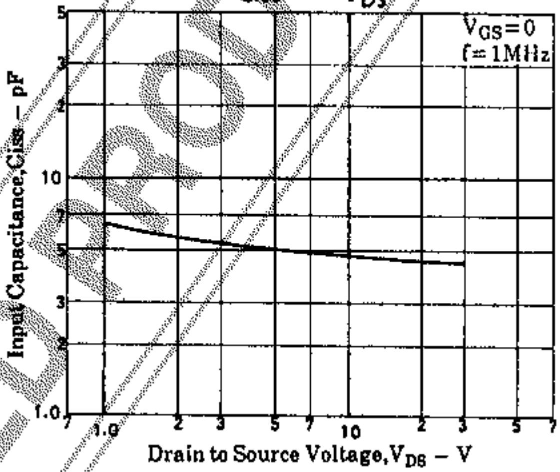
NF – f



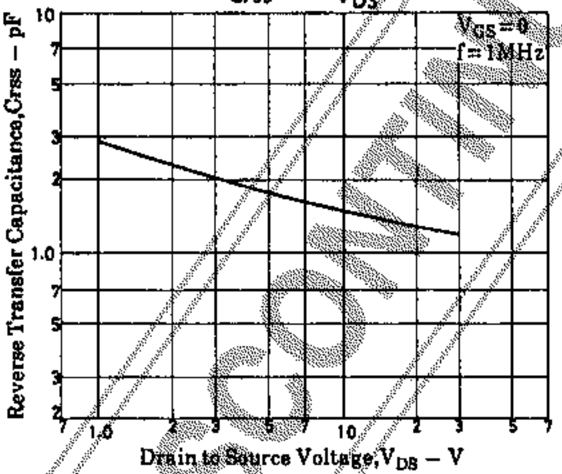
NF – f



Ciss – V_{DS}



Crss – V_{DS}



P_D – Ta