

**2SK2170**

Impedance Converter Applications

Applications

- Low-frequency amplifier, analog switch, constant current source.

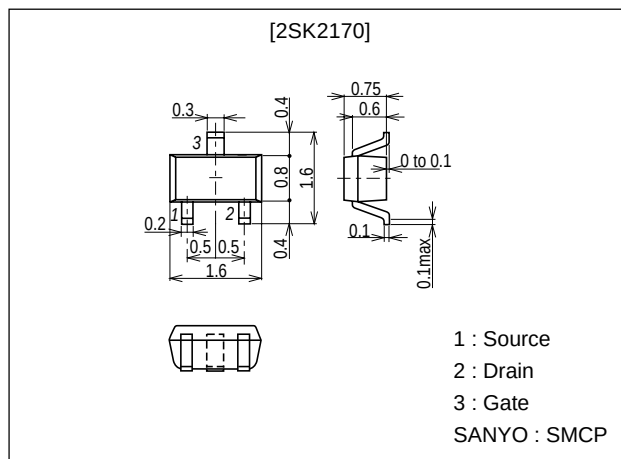
Features

- Ultrasmall-sized package permitting 2SK2170-applied sets to be made small and slim.

Package Dimensions

unit:mm

2124



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	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		100	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	$V_{(BR)GDS}$	$I_G = -10\mu A, V_{DS} = 0$	-30			V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 10V, V_{GS} = 0$	1.2		4.5	mA
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = -20V, V_{DS} = 0$			-1.0	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1\mu A$	-0.2	-0.7	-2.5	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = 10V, V_{GS} = 0, f = 1kHz$	2.5	5.0		mS
Input Capacitance	C_{iss}	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		5.0		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$		0.9		pF
Static Drain-to-Source ON-State Resistance	$R_{DS(on)}$	$V_{DS} = 10mV, V_{GS} = 0$		250		Ω

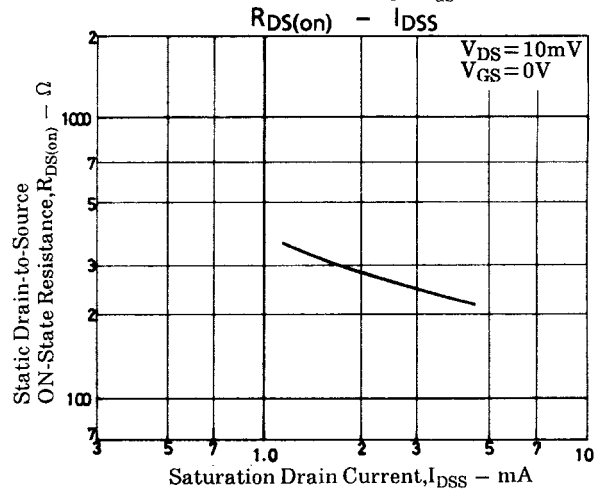
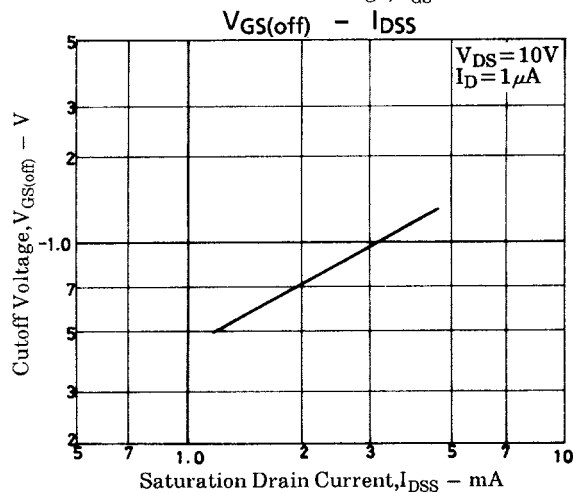
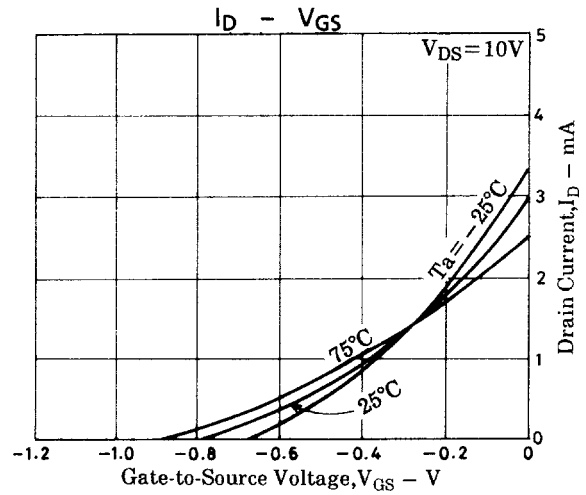
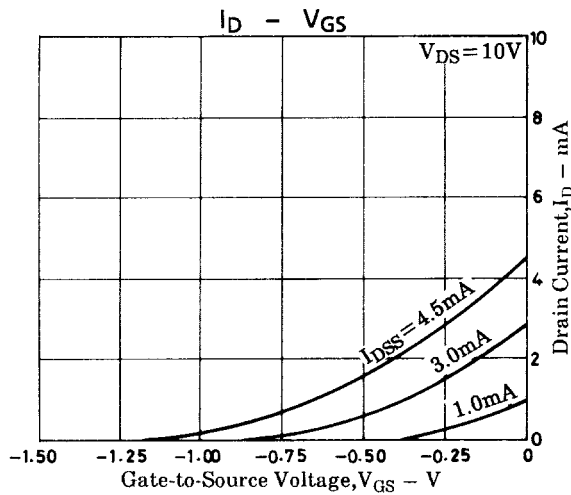
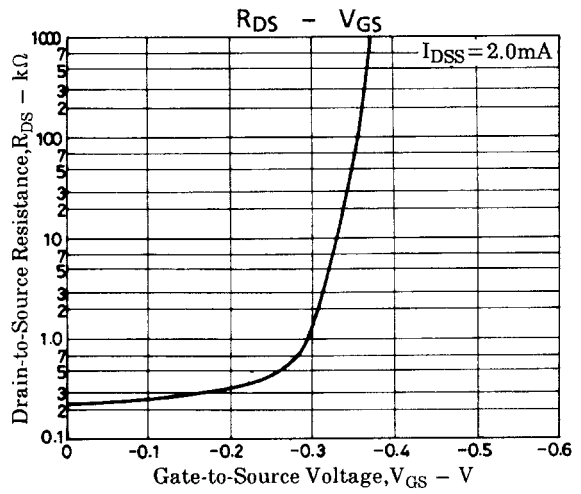
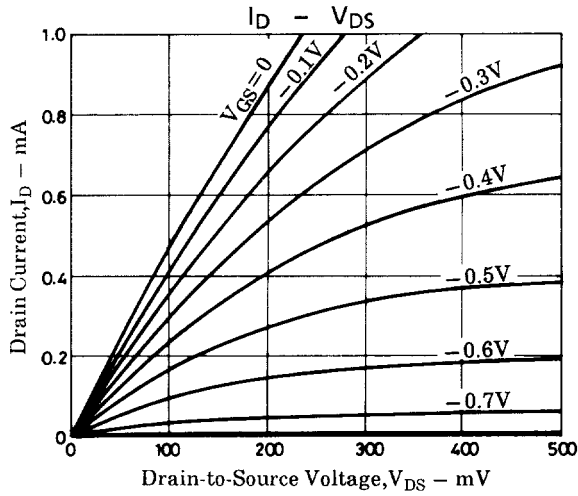
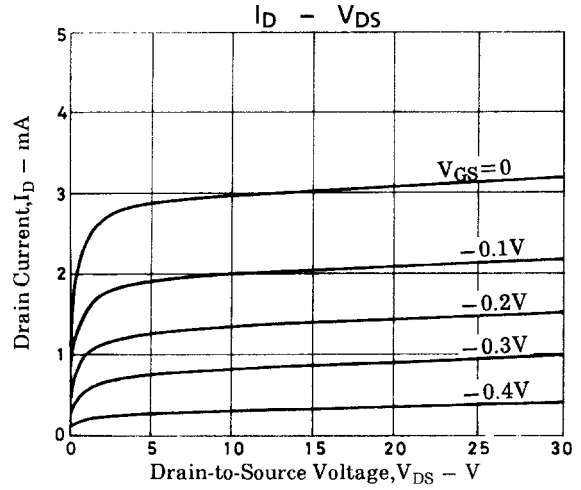
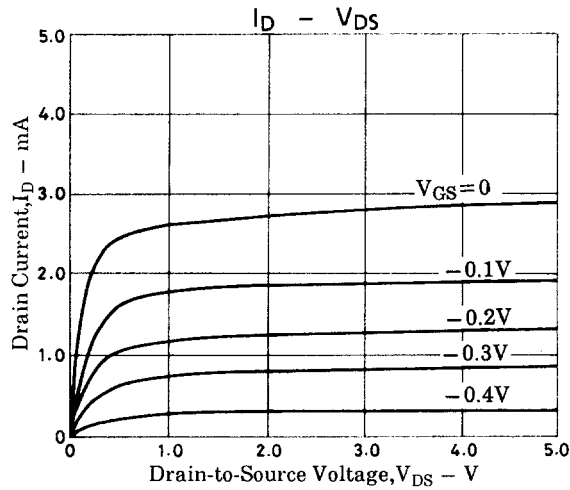
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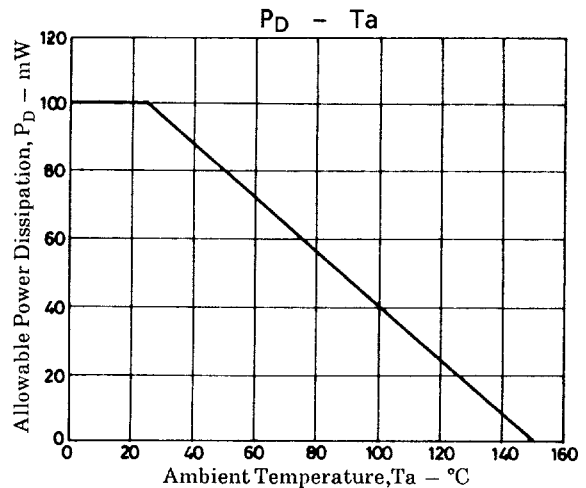
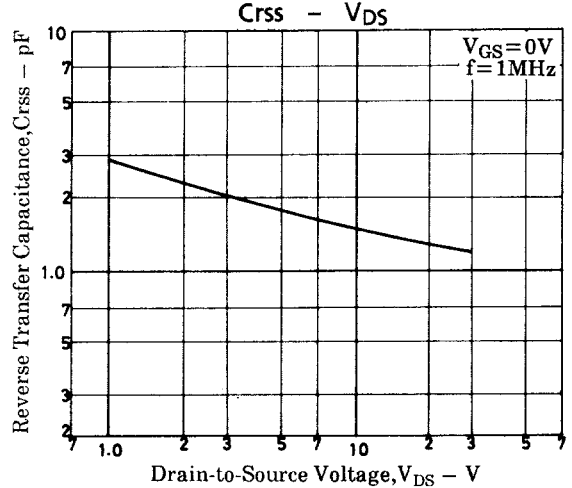
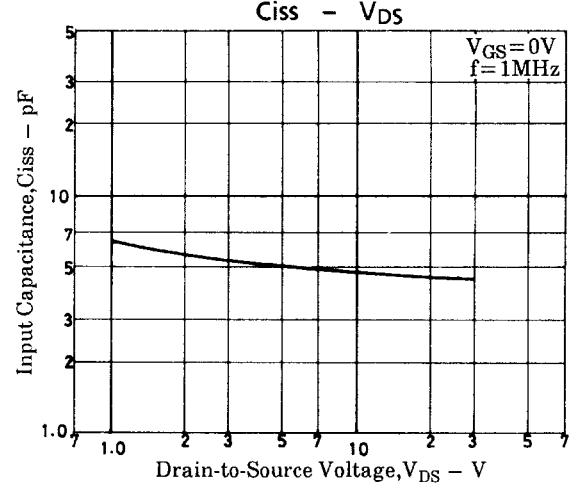
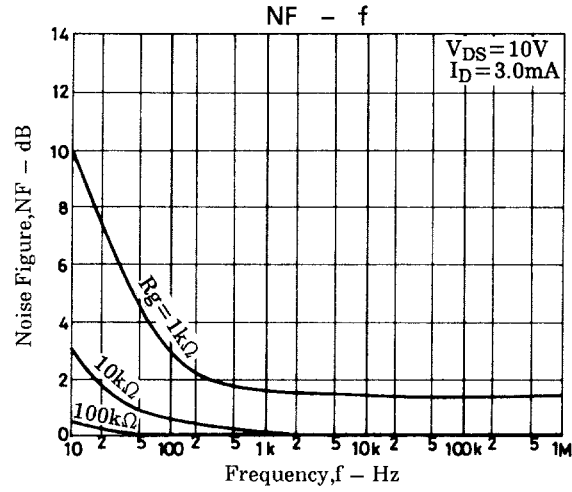
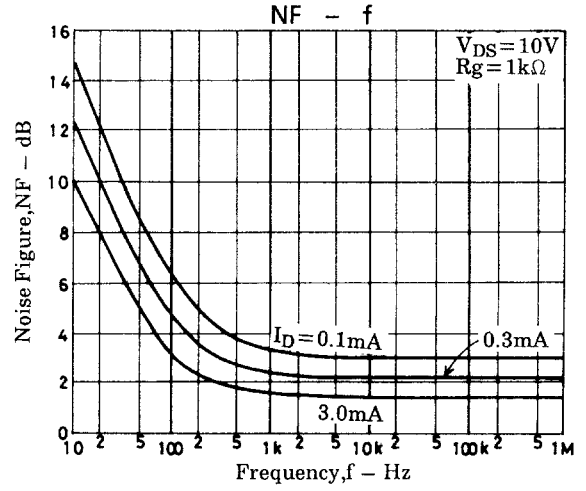
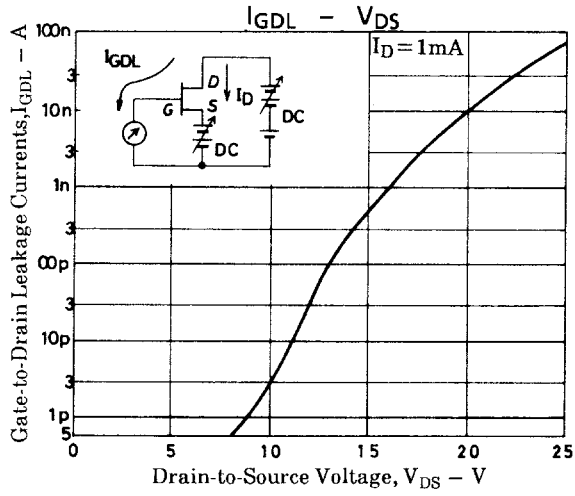
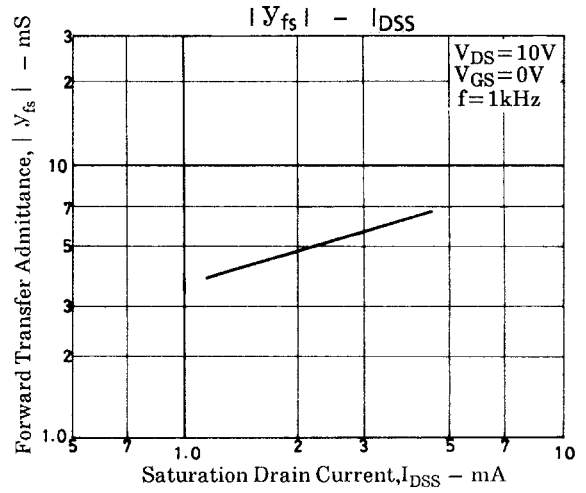
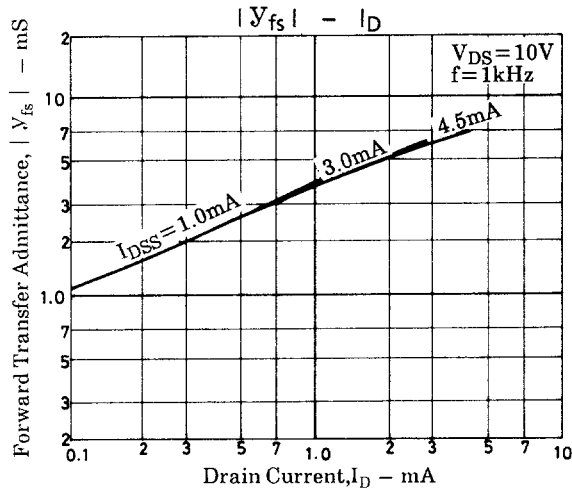
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