



# 2SK2170

— N-Channel Junction Silicon FET  
**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.

## Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V <sub>DSX</sub>		30	V
Gate-to-Drain Voltage	V <sub>GDS</sub>		-30	V
Gate Current	I <sub>G</sub>		10	mA
Drain Current	I <sub>D</sub>		20	mA
Allowable Power Dissipation	P <sub>D</sub>		100	mW
Junction Temperature	T <sub>j</sub>		150	°C
Storage Temperature	T <sub>stg</sub>		-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 <sub>G</sub> =-10μA, V <sub>DS</sub> =0	-30			V
Gate-to-Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> =-20V, V <sub>DS</sub> =0			-1.0	nA
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =1μA	-0.2	-0.7	-2.5	V
Zero-Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0	1.2		4.0	mA
Forward Transfer Admittance	y <sub>fs</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0, f=1kHz	2.5	5.0		mS
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0, f=1kHz		5.0		pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0, f=1kHz		0.9		pF
Static Drain-to-Source ON-State Resistance	R <sub>DS(on)</sub>	V <sub>DS</sub> =10mV, V <sub>GS</sub> =0		250		Ω

Marking : JA

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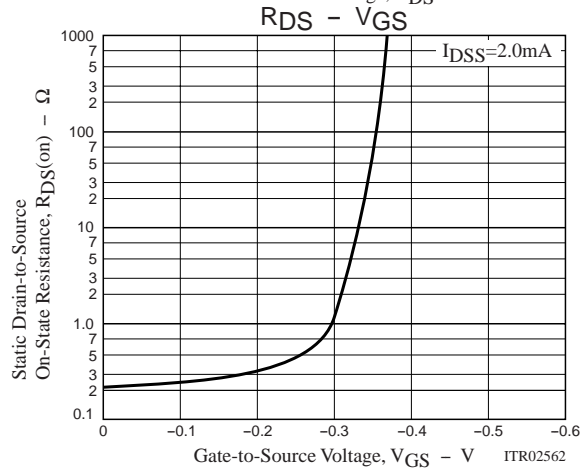
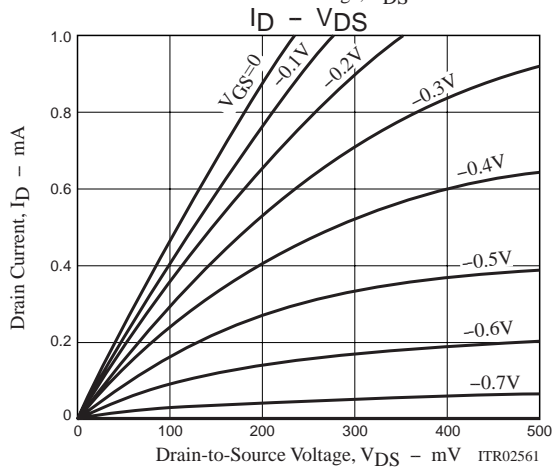
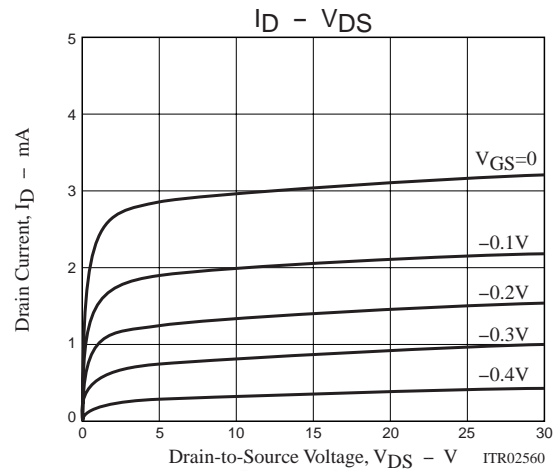
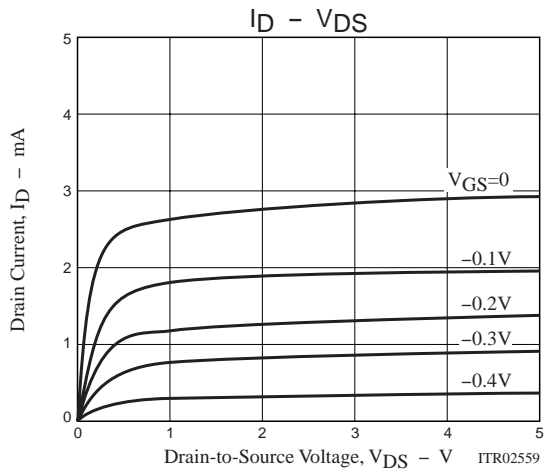
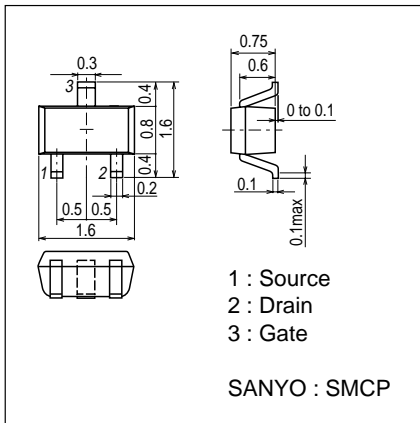
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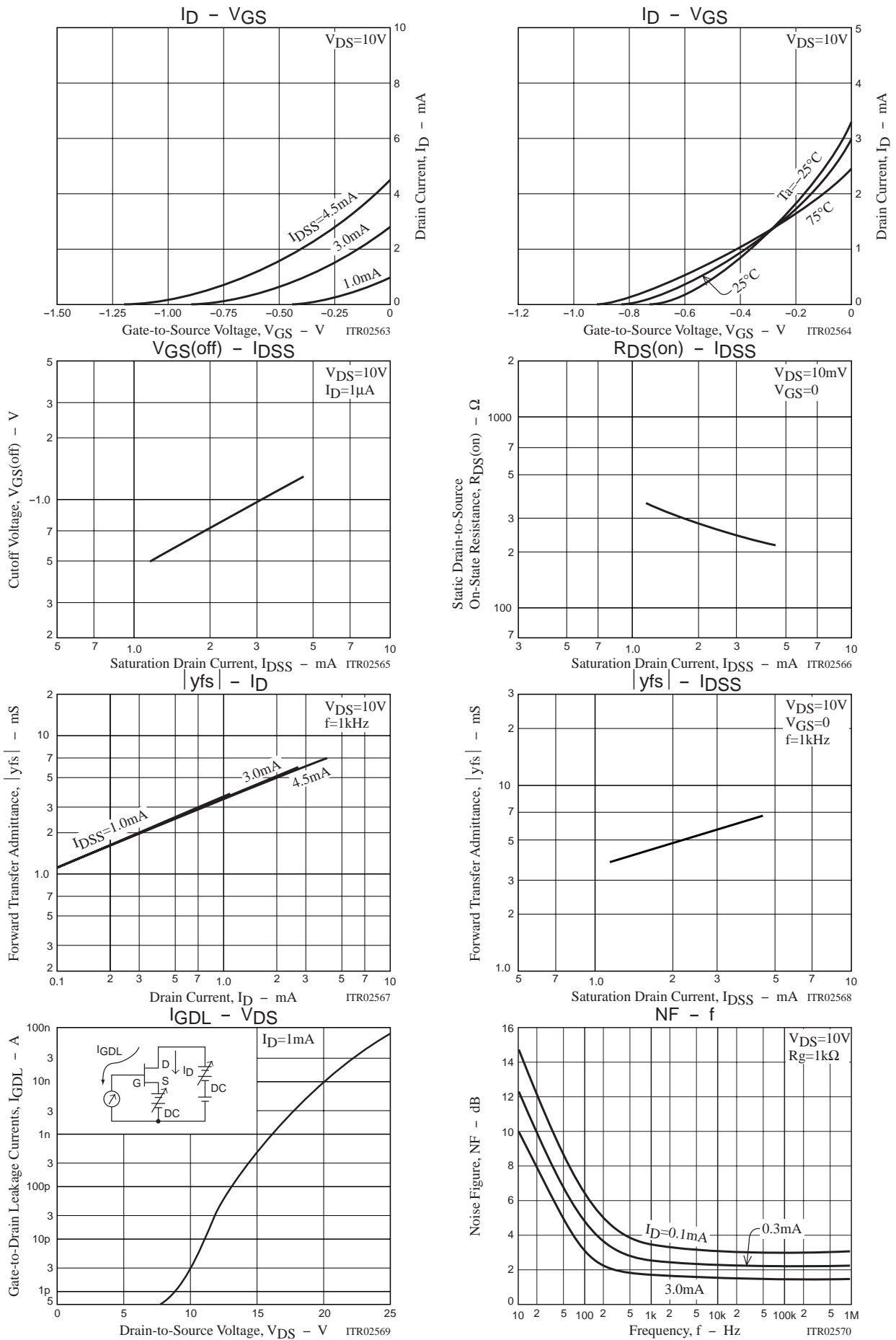
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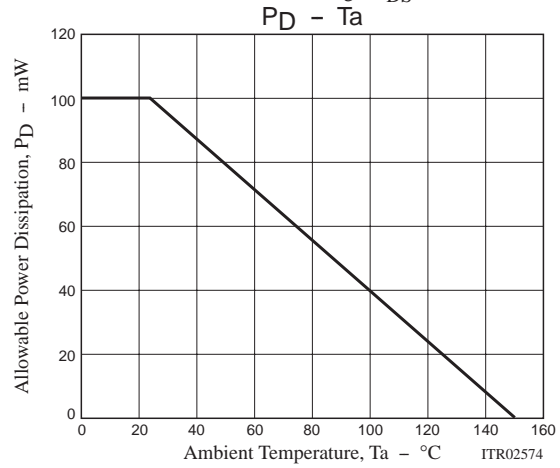
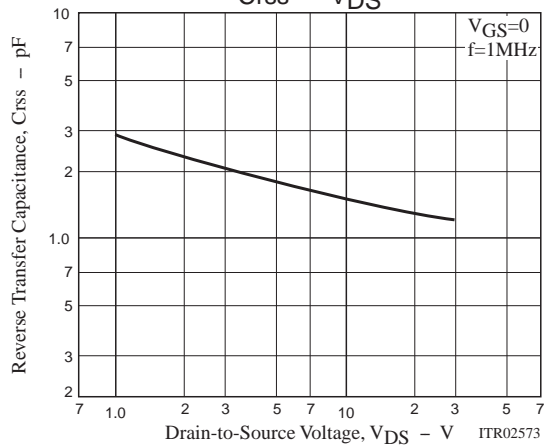
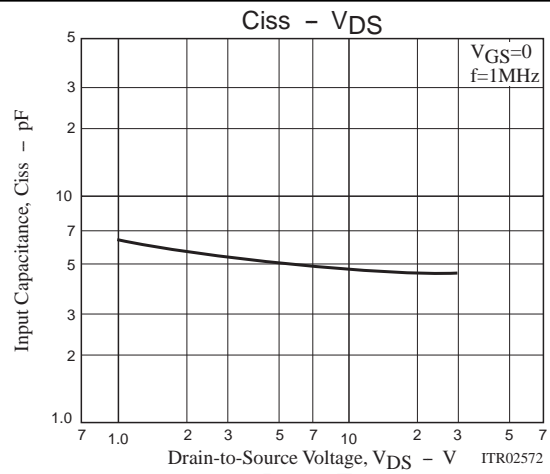
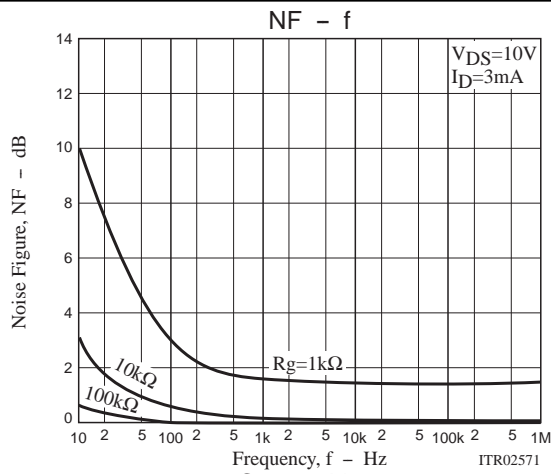
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Package Dimensions

unit : mm  
2124







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