



# CPH6901

N-Channel Silicon Junction FET  
**Low-Frequency General-Purpose Amplifier,  
 Differential Amplifier, Analog Switch Applications**

## Features

- Composite type with 2 FET contained in a CP package currently in use, improving the mounting efficiency greatly.
- The CPH6901 is formed with two chips, being equivalent to the 2SK303, placed in one package.
- Optimal for differential amplification due to excellent thermal equilibrium and pair capability.

## 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 Voltage	I <sub>G</sub>		10	mA
Drain Current	I <sub>D</sub>		10	mA
Allowable Power Dissipation	P <sub>D</sub>	1 unit	200	mW
Total Power Dissipation	P <sub>T</sub>		300	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) <sub>GDS</sub>	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	-0.3	-0.8	-1.25	V
Gate-to-Source Voltage Difference	ΔV <sub>GS</sub>	V <sub>GS Large</sub> -V <sub>GS Small</sub>   V <sub>DS</sub> =10V, I <sub>D</sub> =1mA			50	mV
Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0(FET1)	1.2		3.0	mA
Drain Current Ratio		I <sub>DSS Small</sub> / I <sub>DSS Large</sub>	0.9			
Forward Transfer Admittance	y <sub>fs</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0, f=1MHz	3.0	4.5		mS
Forward Transfer Admittance Ratio		y <sub>fs Small</sub>   /  y <sub>fs Large</sub>	0.9			
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0, f=1MHz		5.0		pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0, f=1MHz		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

The specifications shown above are for each individual transistor.

Marking : 1G

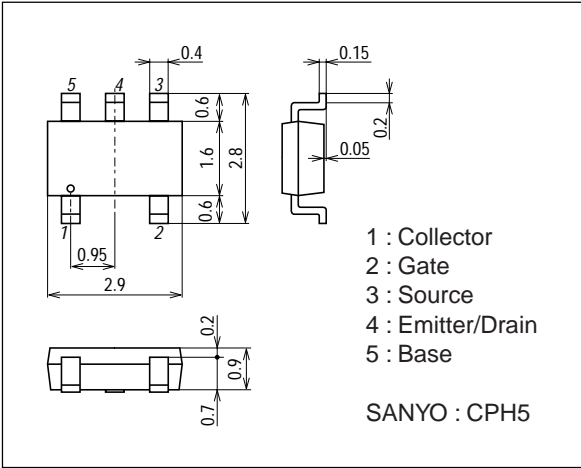
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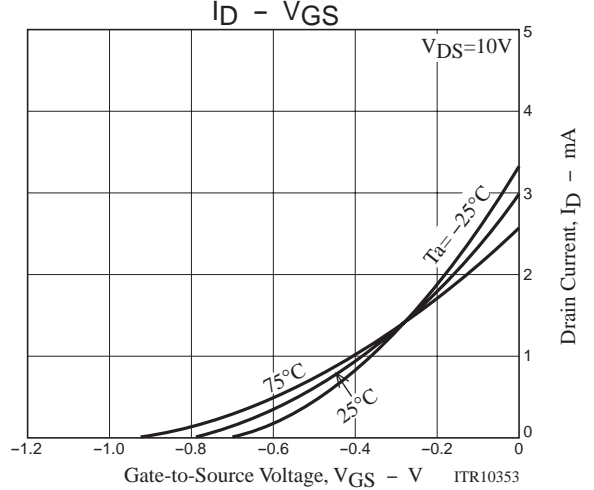
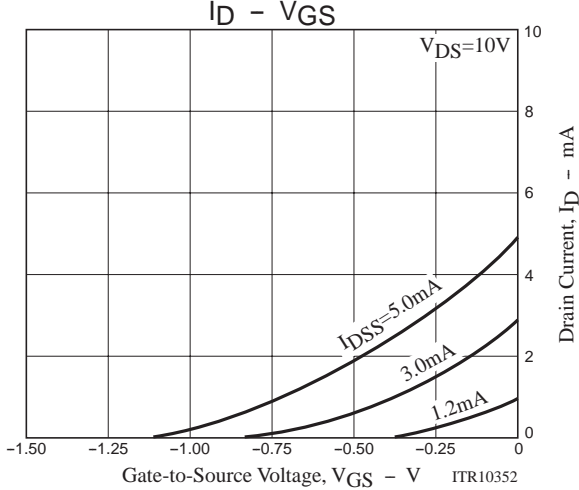
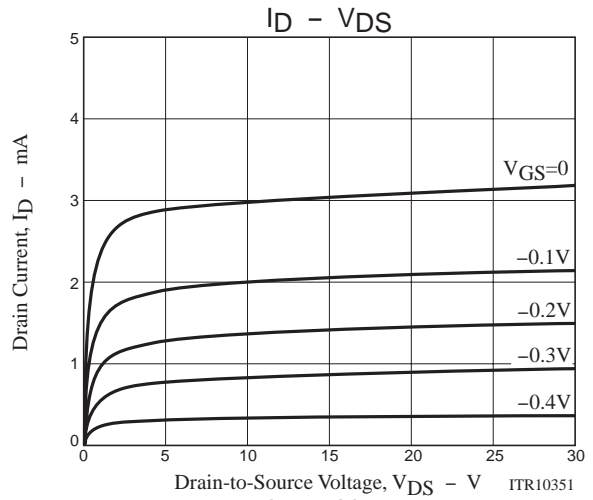
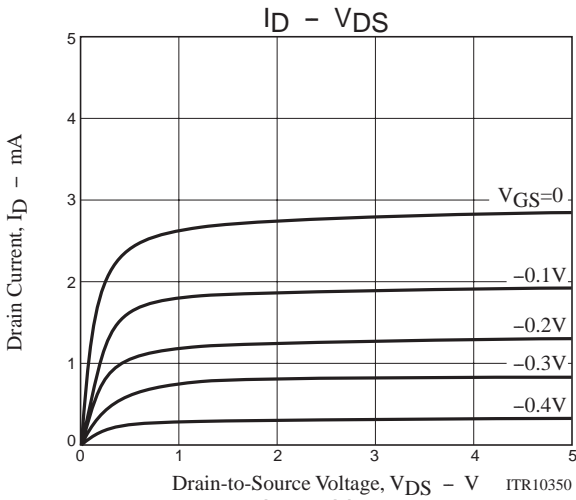
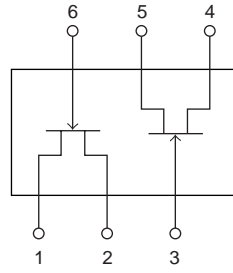
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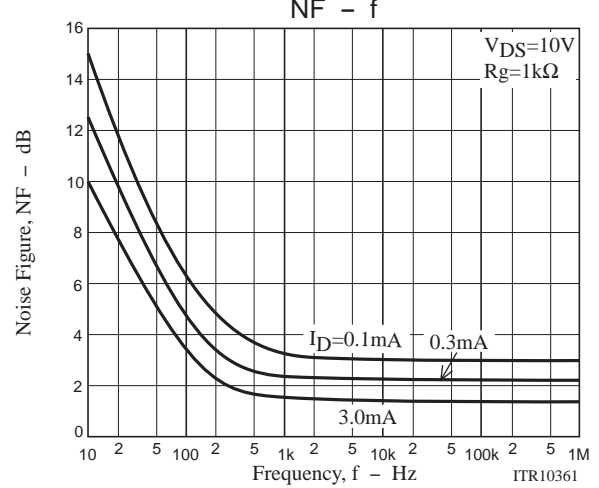
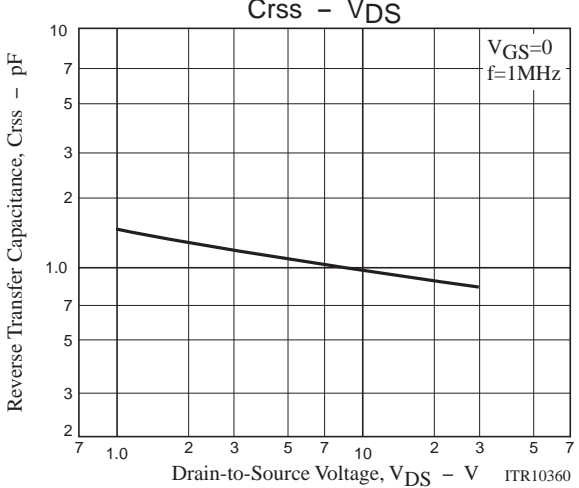
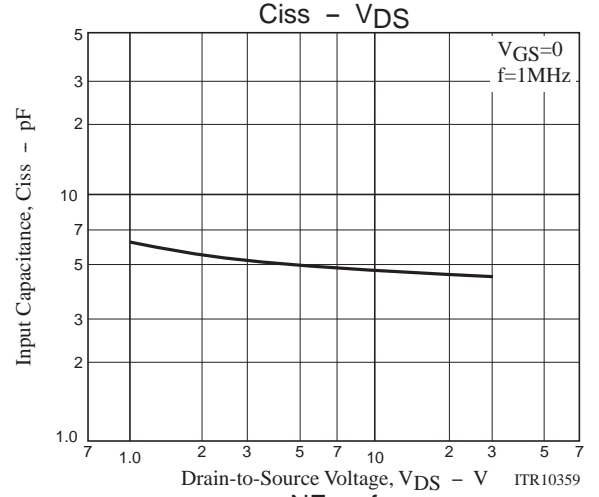
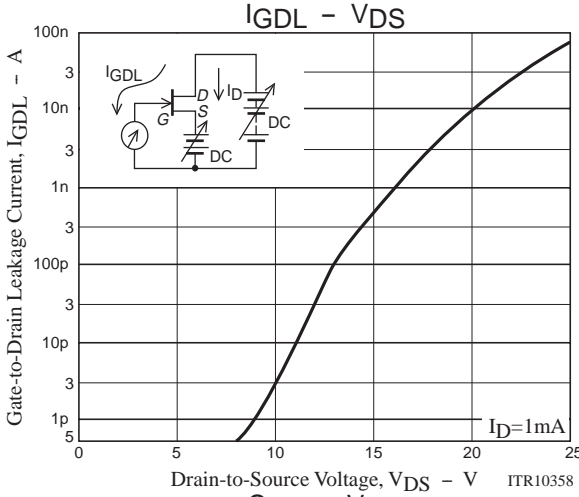
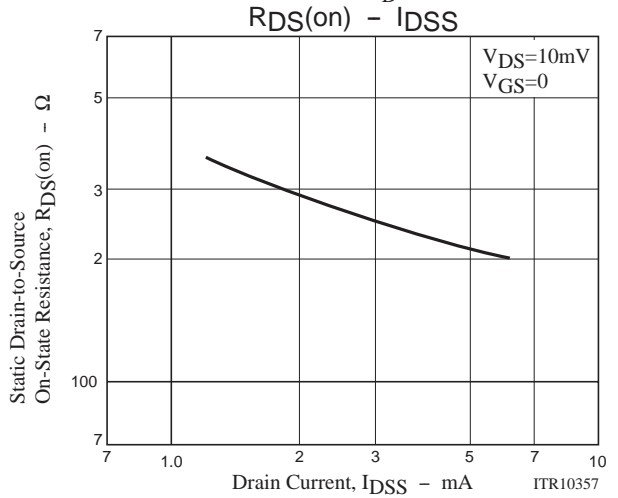
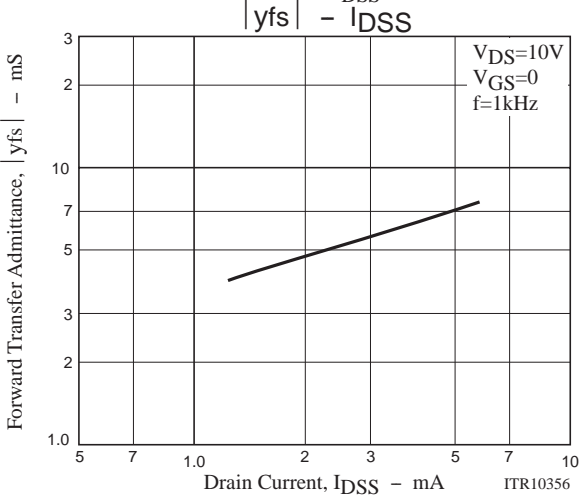
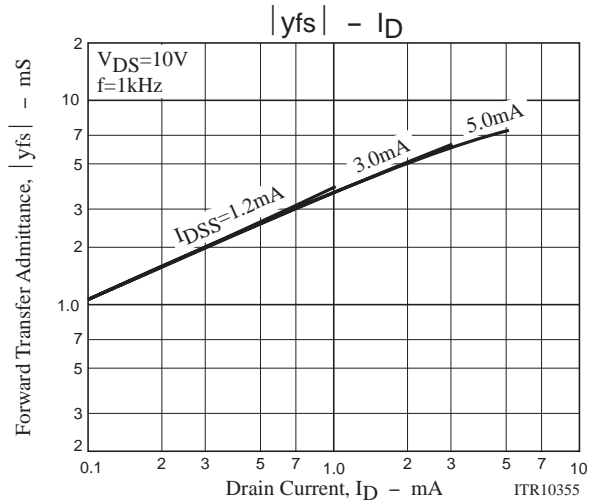
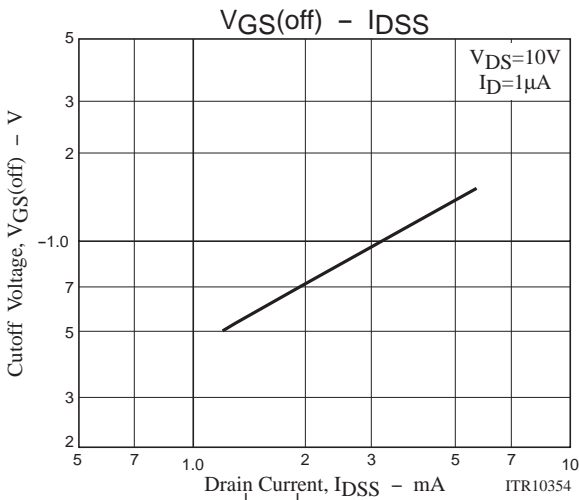
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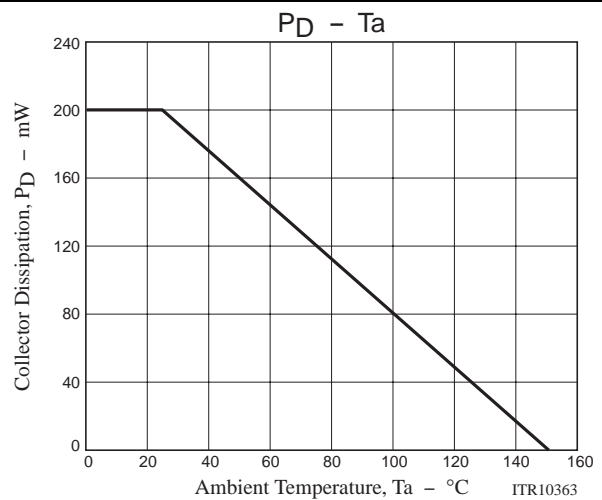
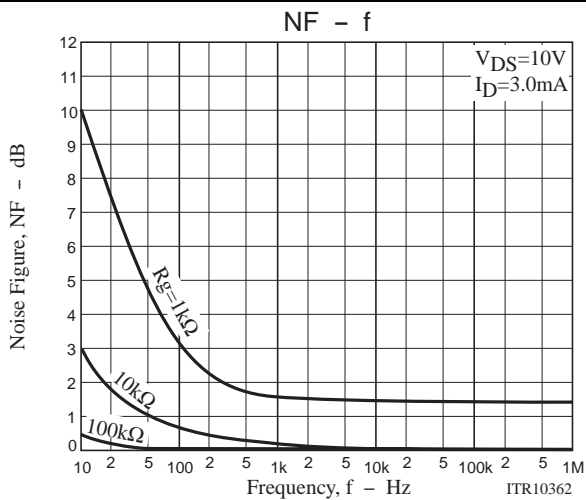
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## Electrical Connection







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