



SANYO Semiconductors

DATA SHEET

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_{DSX}		30	V
Gate-to-Drain Voltage	V_{GDS}		-30	V
Gate Voltage	I_G		10	mA
Drain Current	I_D		10	mA
Allowable Power Dissipation	P_D	1 unit	200	mW
Total Power Dissipation	P_T		300	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
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS} = -20V, V_{DS} = 0$			-1.0	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS} = 10V, I_D = 1\mu A$	-0.3	-0.8	-1.25	V
Gate-to-Source Voltage Difference	ΔV_{GS}	$ V_{GS \text{ Large}} - V_{GS \text{ Small}} , V_{DS} = 10V, I_D = 1mA$			50	mV
Drain Current	I_{DSS}	$V_{DS} = 10V, V_{GS} = 0(FET1)$	1.2		3.0	mA
Drain Current Ratio		$I_{DSS \text{ Small}} / I_{DSS \text{ Large}}$	0.9			
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = 10V, V_{GS} = 0, f = 1MHz$	3.0	4.5		mS
Forward Transfer Admittance Ratio		$ y_{fs \text{ Small}} / y_{fs \text{ Large}} $	0.9			
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

The specifications shown above are for each individual transistor.

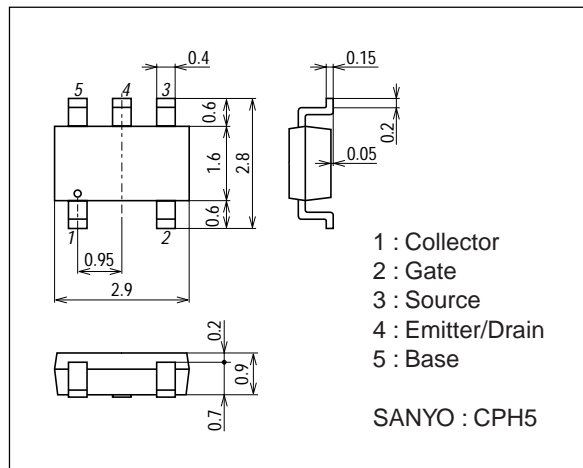
Marking : 1G

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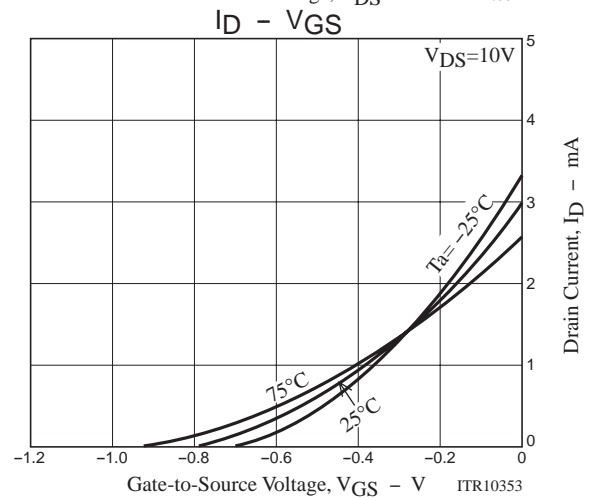
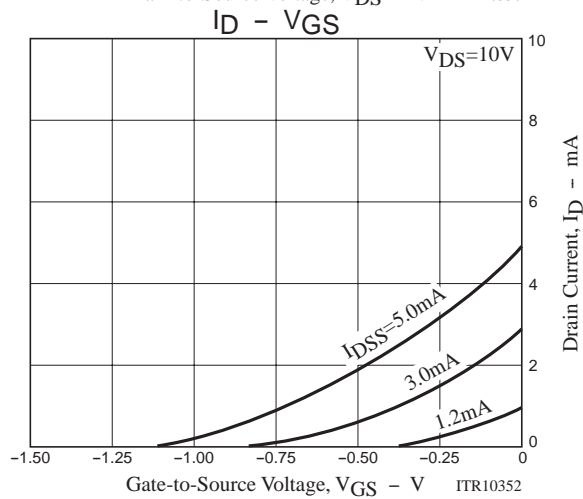
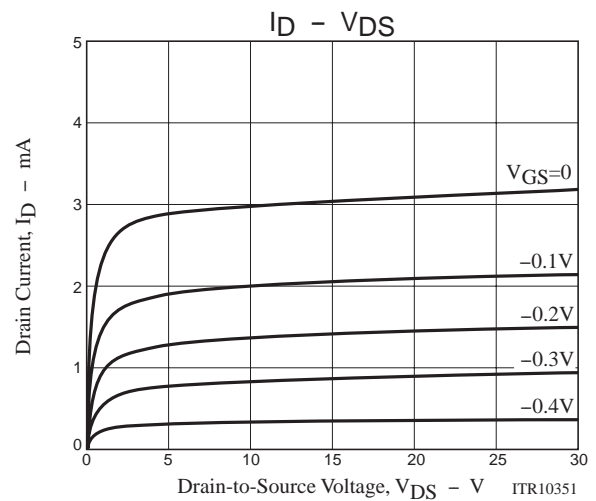
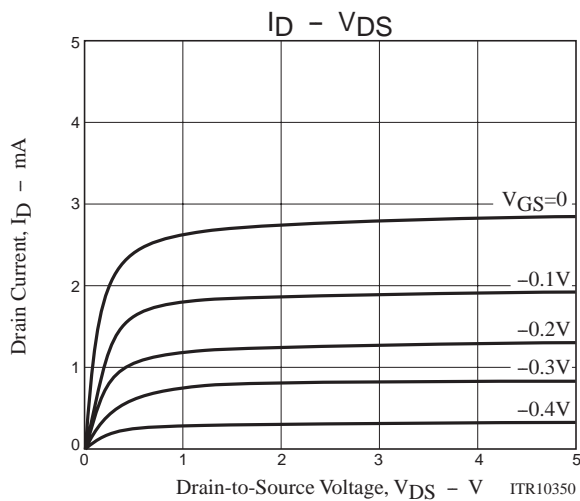
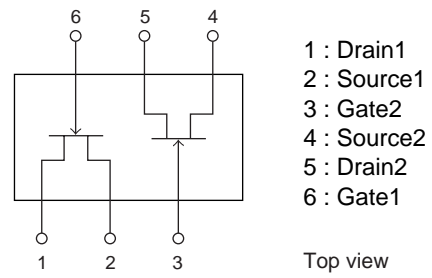
Package Dimensions

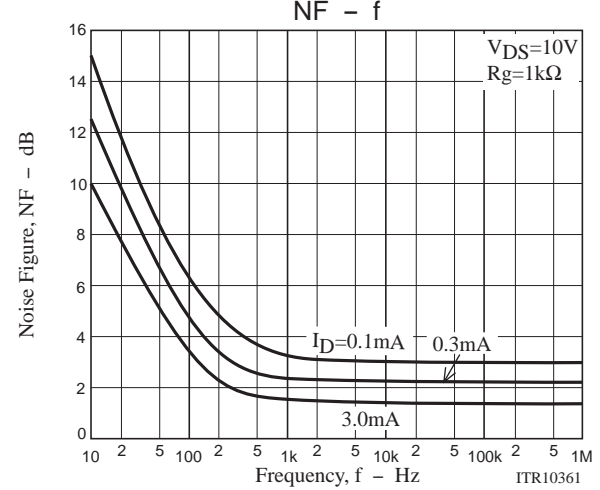
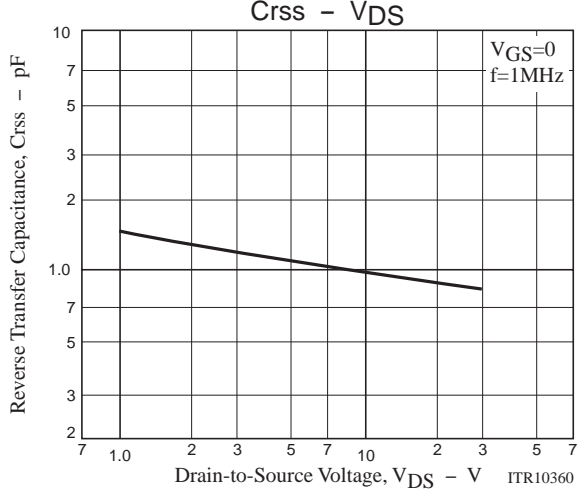
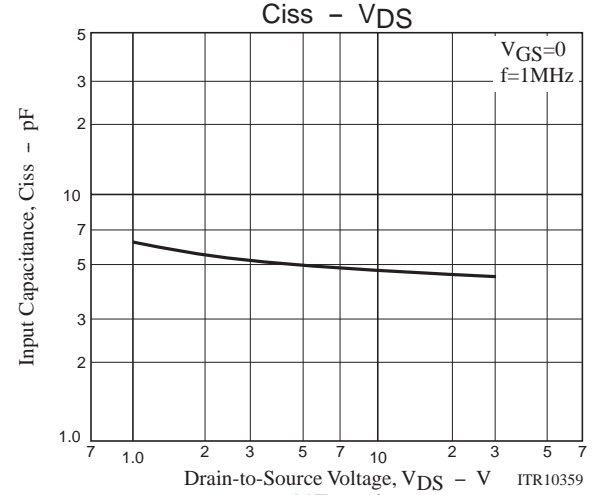
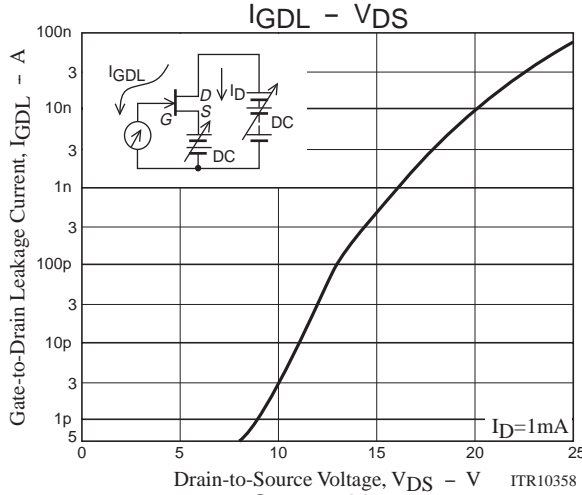
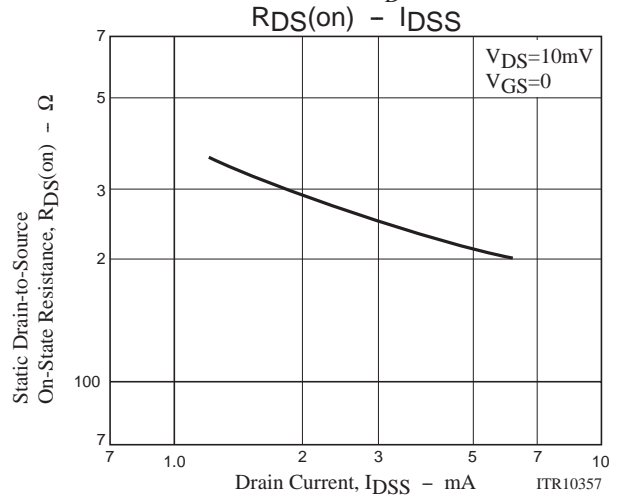
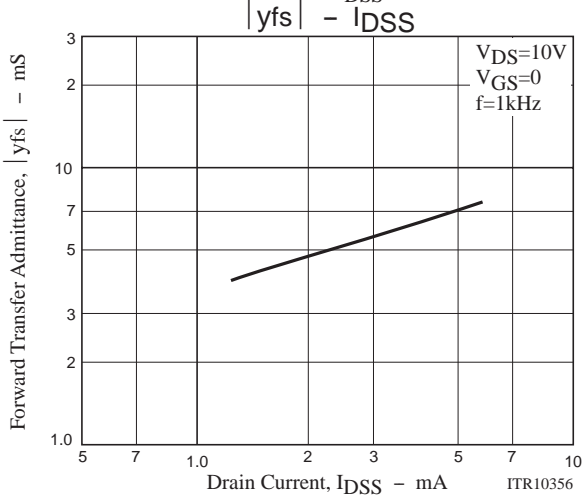
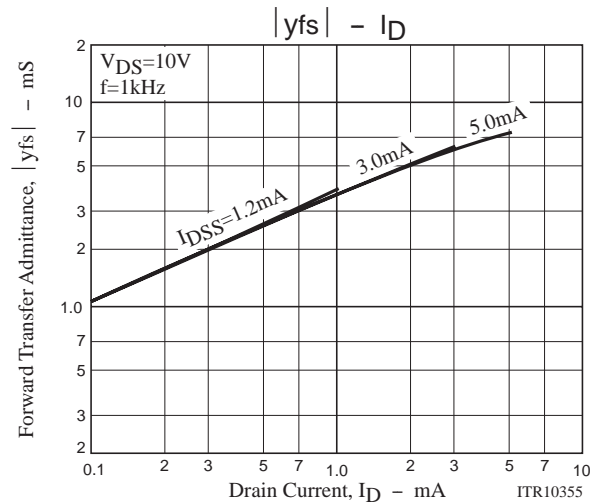
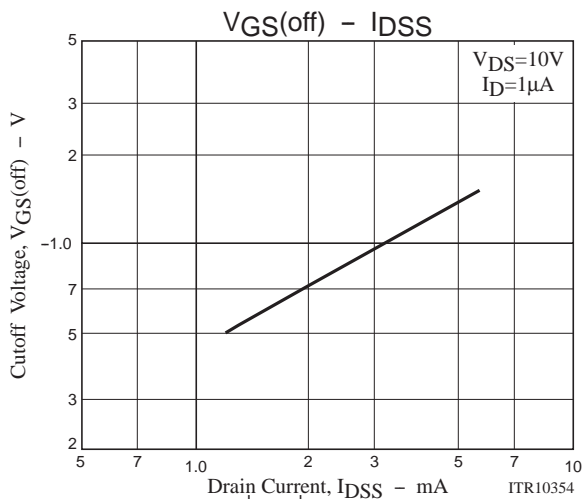
unit : mm

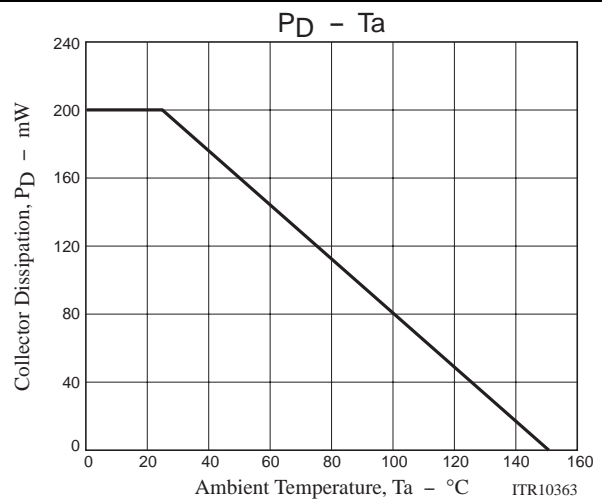
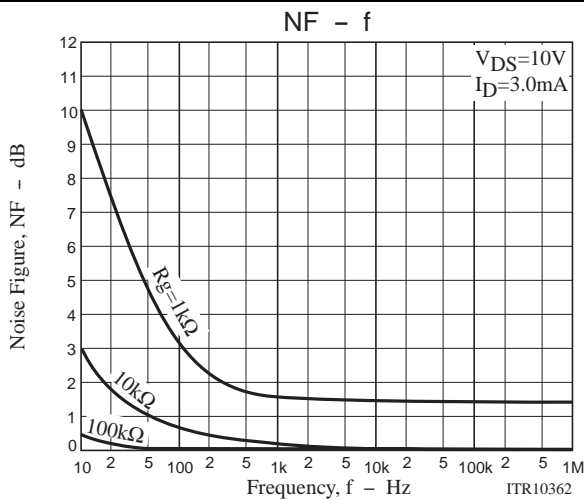
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Electrical Connection







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