



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

N-Channel Silicon MOSFET

CPH6904 — High-Frequency Low-Noise Amplifier Applications

Features

- Composite type with 2 J-FET contained in a CPH6 package currently in use, improving the mounting efficiency greatly
- The CPH6904 is formed with two chips, being equivalent to the CPH3910, placed in one package

Specifications

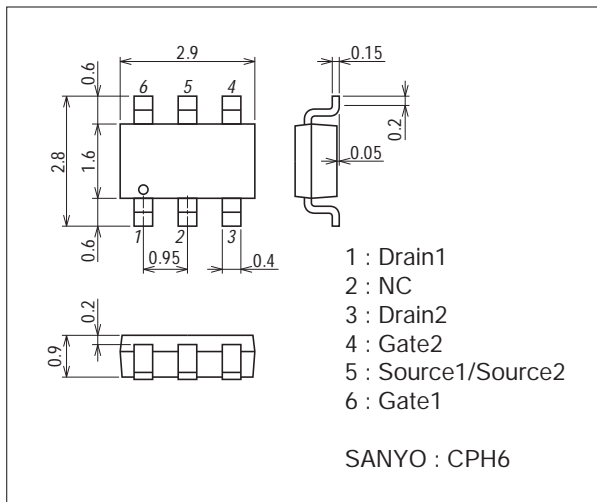
Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSX}		25	V
Gate-to-Source Voltage	V _{GDS}		-25	V
Gate Current	I _G		10	mA
Drain Current	I _D		50	mA
Allowable Power Dissipation	P _D	1unit	400	mW
Total Power Dissipation	P _T		700	mW
Channel Temperature	T _{ch}		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Package Dimensions

unit : mm (typ)

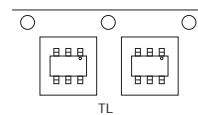
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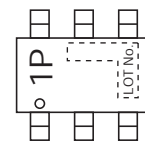
Product & Package Information

- Package : CPH6
- JEITA, JEDEC : SC-74, SOT-26, SOT-457
- Minimum Packing Quantity : 3,000 pcs./reel

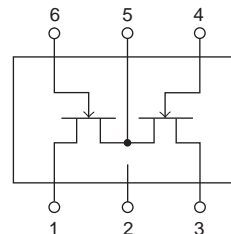
Packing Type: TL



Marking



Electrical Connection

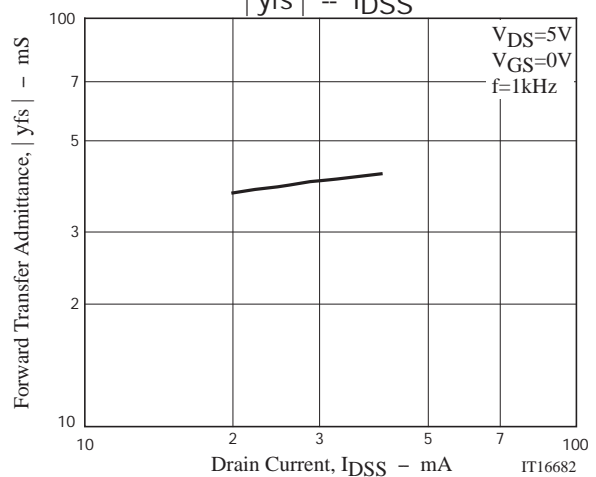
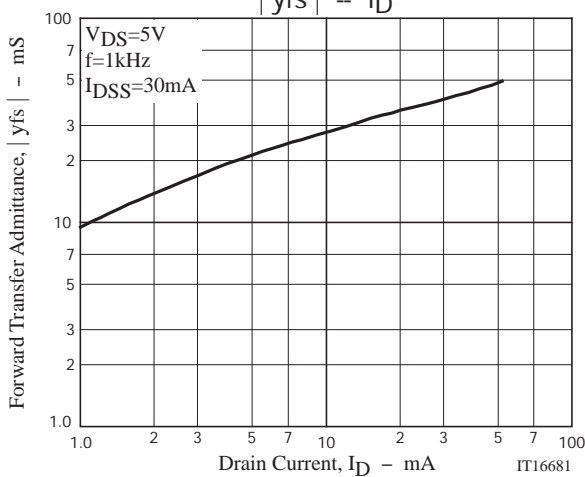
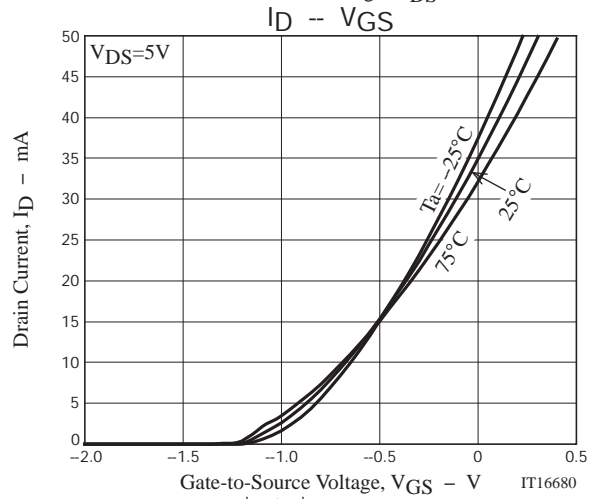
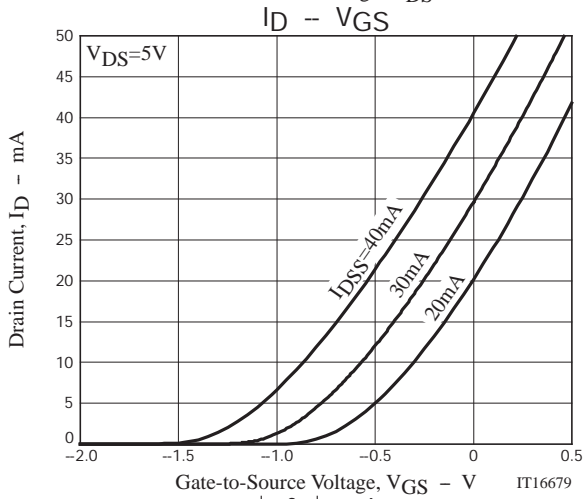
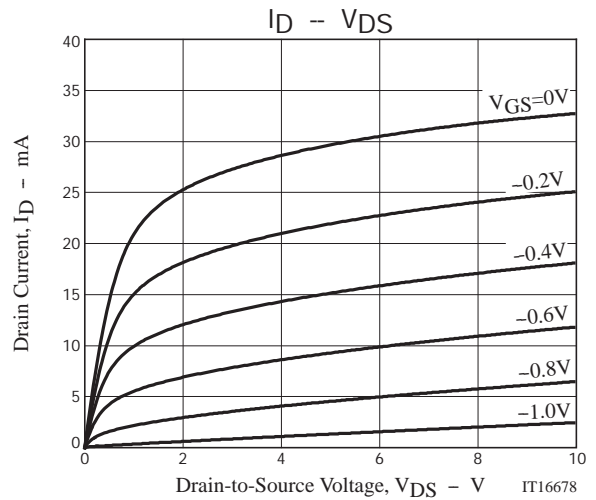
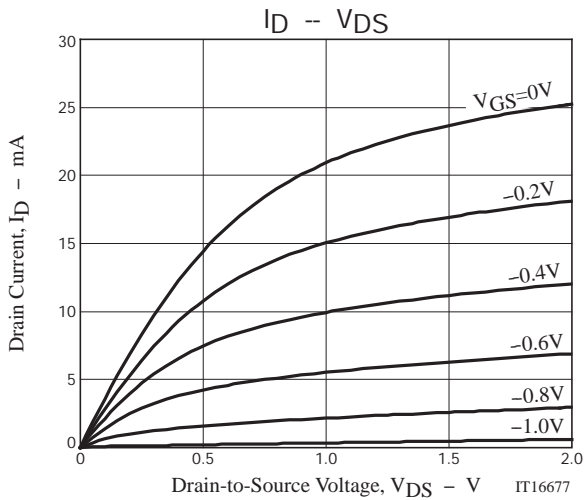


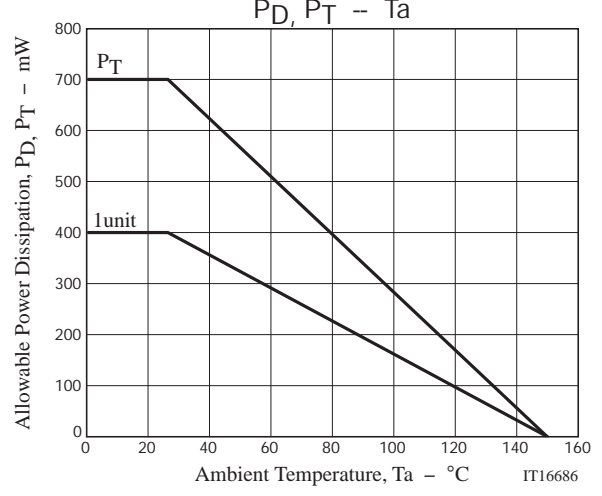
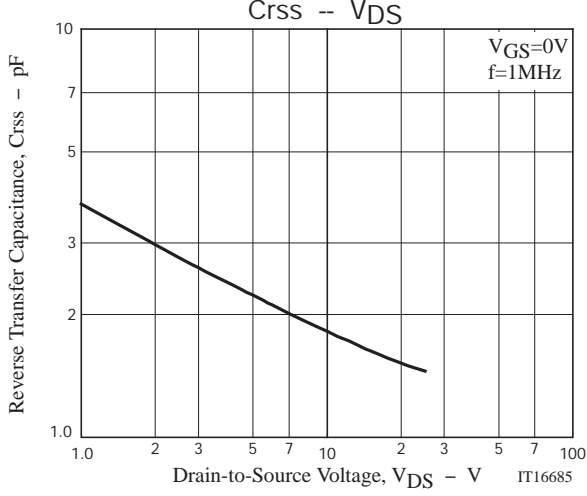
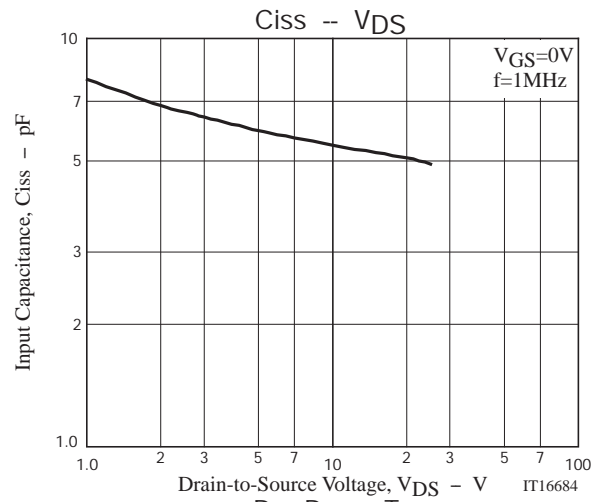
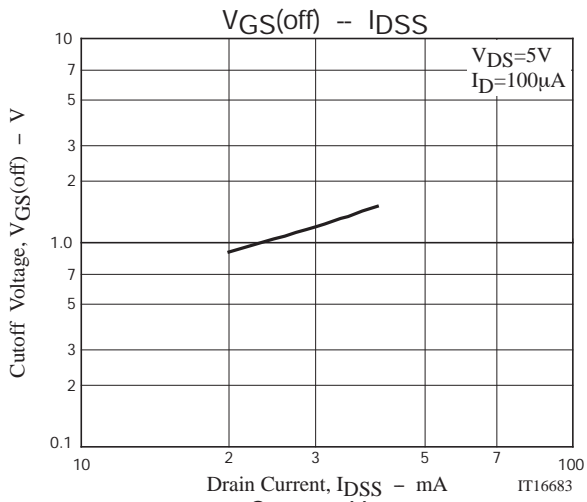
CPH6904

Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	$V_{(BR)GDS}$	$I_G=-10\mu\text{A}$, $V_{DS}=0\text{V}$	-25			V
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS}=-10\text{V}$, $V_{DS}=0\text{V}$			-1.0	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS}=5\text{V}$, $I_D=100\mu\text{A}$	-0.6	-1.2	-1.8	V
Drain Current	I_{DSS}	$V_{DS}=5\text{V}$, $V_{GS}=0\text{V}$	20.0		40.0	mA
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=5\text{V}$, $V_{GS}=0\text{V}$, $f=1\text{kHz}$	30	40		mS
Input Capacitance	C_{iss}	$V_{DS}=5\text{V}$, $V_{GS}=0\text{V}$, $f=1\text{MHz}$		6.0		pF
Reverse Transfer Capacitance	C_{rss}			2.3		pF
Noise Figure	NF	$V_{DS}=5\text{V}$, $V_{GS}=0\text{V}$, $f=100\text{MHz}$		2.1	2.8	dB

The specifications shown above are for each individual J-FET.





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