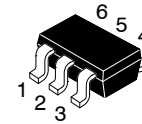


N-Channel JFET

25 V, 20 to 40 mA, 40 mS, Dual CPH6

CPH6904



CPH6
CASE 318BD

特長

- CPH6 にJ-FET を2 素子内蔵した複合タイプであり、実装基板効率が大幅にアップできる
- CPH6904 は、CPH3910 相当のチップを2 個同一ケース内に収容したものである
- これは鉛フリーのデバイスです

製品と外形に伴う情報

- パッケージ名 : CPH6
- JEITA, JEDEC : SC-74, SOT-26, SOT-457
- 最小梱包単位 : 3,000 pcs./reel

絶対最大定格 ($T_A = 25^\circ\text{C}$)

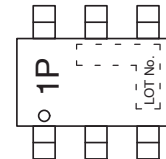
記号	項目	条件	定格値	単位
V_{DSX}	ドレイン・ソース電圧		25	V
V_{GDS}	ゲート・ドレイン電圧		-25	V
I_G	ゲート電流		10	mA
I_D	ドレイン電流		50	mA
P_D	許容損失	1 unit	400	mW
P_T	全損失		700	mW
T_{ch}	チャネル温度		150	$^\circ\text{C}$
T_{stg}	保存周囲温度		-55 ~ +150	$^\circ\text{C}$

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

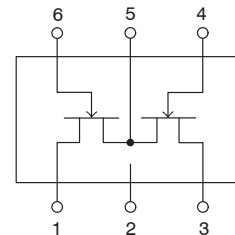
(参考訳)

最大定格を超えるストレスは、デバイスにダメージを与える危険性があります。これらの定格値を超えた場合は、デバイスの機能性を損ない、ダメージが生じたり、信頼性に影響を及ぼす危険性があります。

MARKING DIAGRAM



ELECTRICAL CONNECTION



- 1 : Drain 1
 2 : NC
 3 : Drain 2
 4 : Gate 2
 5 : Source 1 / Source 2
 6 : Gate 1

ORDERING INFORMATION

Device	Package	Shipping [†]
CPH6904-TL-E	CPH6 (Pb-Free)	3 000 / Tape & Reel

[†]For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification Brochure, [BRD8011/D](http://www.onsemi.jp).

電気的特性 ($T_A = 25^\circ\text{C}$)

記号	項目	条件	最小	標準値	最大	単位
$V_{(BR)GDS}$	ゲート・ドレイン降伏電圧	$I_G = -10\ \mu\text{A}$, $V_{DS} = 0\ \text{V}$	-25			V
I_{GSS}	ゲートシャ断電流	$V_{GS} = -10\ \text{V}$, $V_{DS} = 0\ \text{V}$			-1.0	nA
$V_{GS(off)}$	ゲート・ソースシャ断電圧	$V_{DS} = 5\ \text{V}$, $I_D = 100\ \mu\text{A}$	-0.6	-1.2	-1.8	V
I_{DSS}	ドレイン電流	$V_{DS} = 5\ \text{V}$, $V_{GS} = 0\ \text{V}$	20.0		40.0	mA
$ y_{fs} $	順伝達アドミタンス	$V_{DS} = 5\ \text{V}$, $V_{GS} = 0\ \text{V}$, $f = 1\ \text{kHz}$	30	40		mS
C_{iss}	入力容量	$V_{DS} = 5\ \text{V}$, $V_{GS} = 0\ \text{V}$, $f = 1\ \text{MHz}$		6.0		pF
C_{rss}	帰還容量	$V_{DS} = 5\ \text{V}$, $V_{GS} = 0\ \text{V}$, $f = 1\ \text{MHz}$		2.3		pF
N_F	雑音指数	$V_{DS} = 5\ \text{V}$, $V_{GS} = 0\ \text{V}$, $f = 100\ \text{MHz}$		2.1	2.8	dB

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

(参考訳)

製品パラメータは、特別な記述が無い限り、記載されたテスト条件に対する電気的特性で示しています。異なる条件下で製品動作を行った時には、電気的特性で示している特性を得られない場合があります。

電氣的特性の代表例

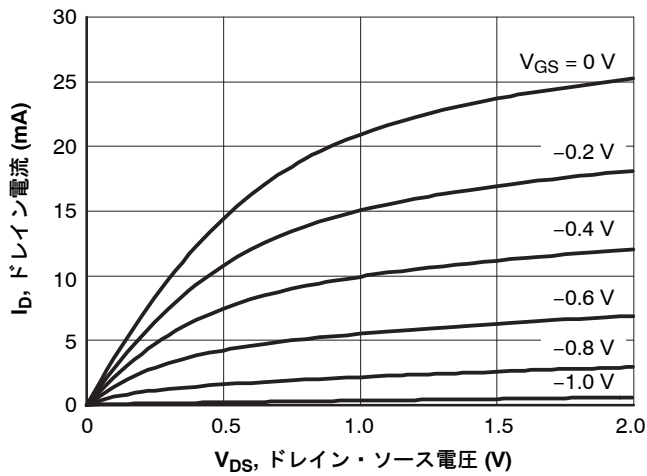


図 1. $I_D - V_{DS}$

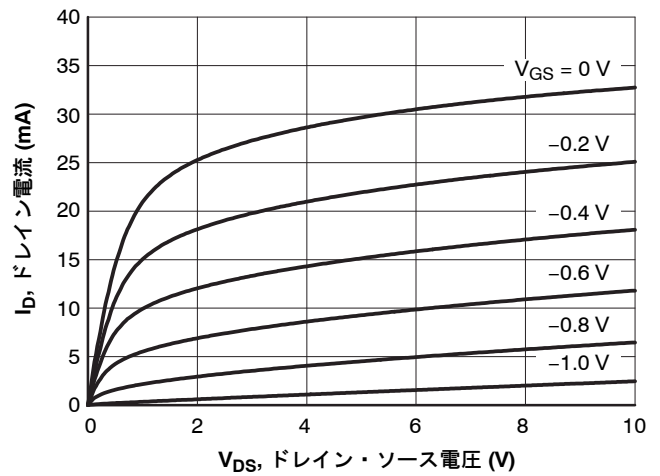


図 2. $I_D - V_{DS}$

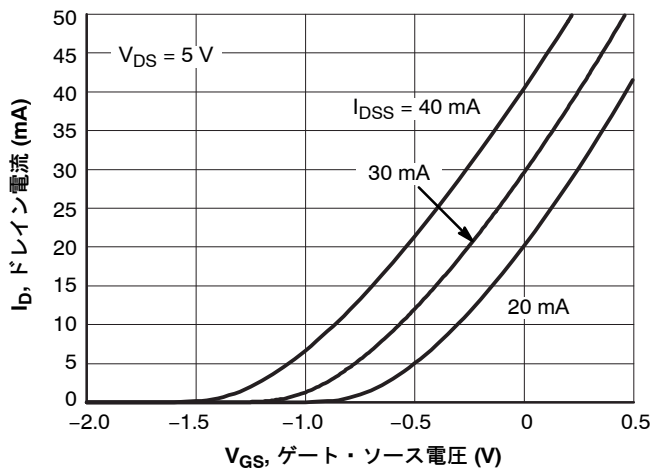


図 3. $I_D - V_{GS}$

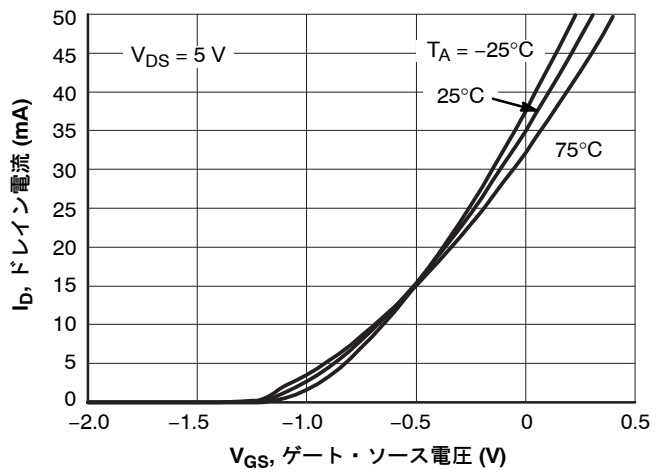


図 4. $I_D - V_{GS}$

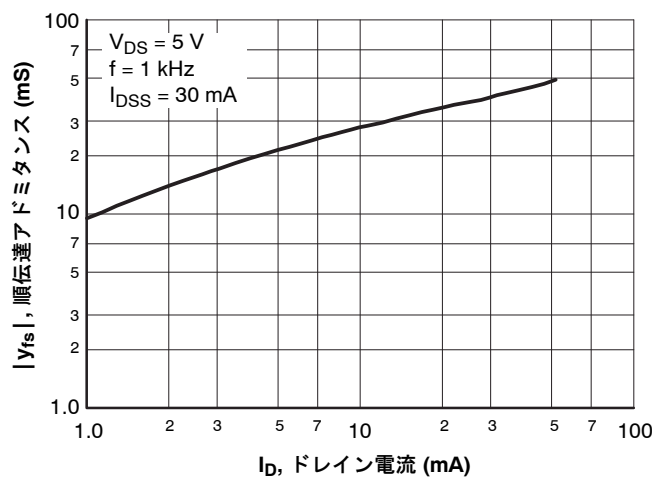


図 5. $|y_{fs}| - I_D$

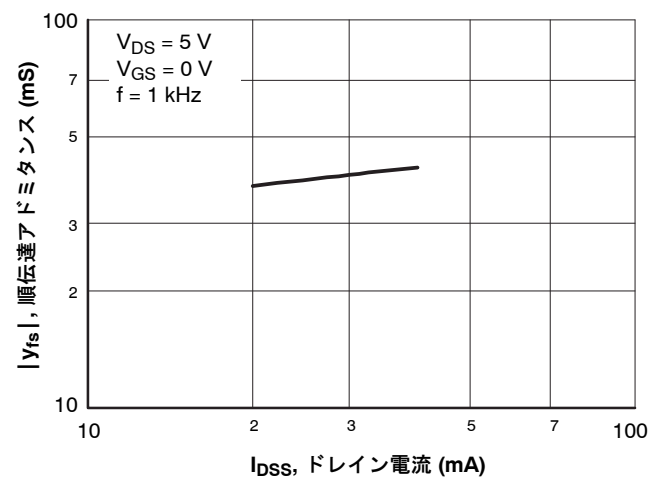


図 6. $|y_{fs}| - I_{DSS}$

電氣的特性の代表例 (つづき)

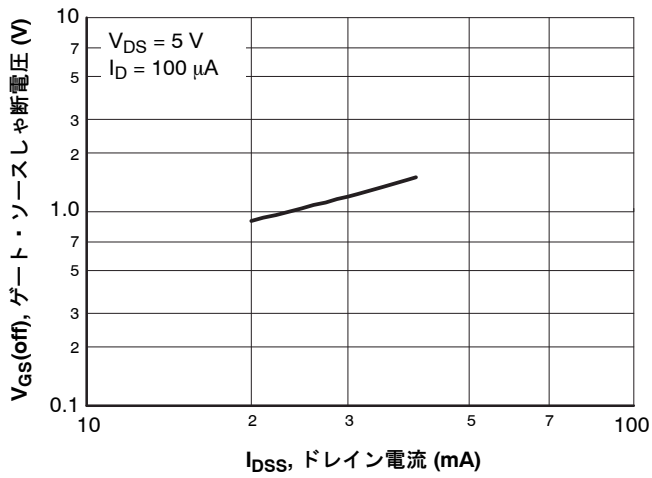


図 7. $V_{GS(off)} - I_{DSS}$

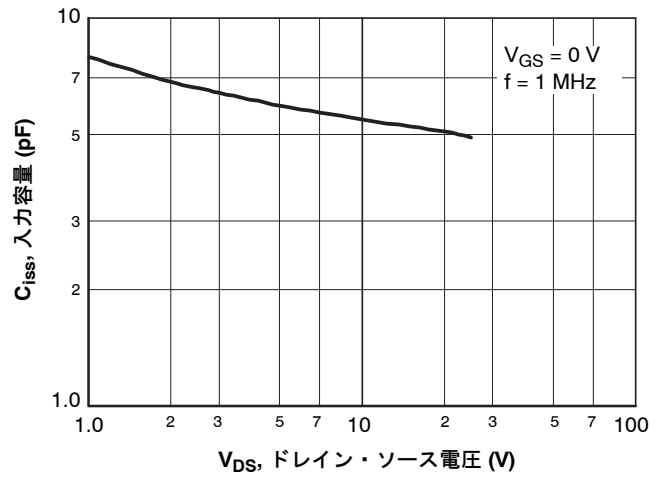


図 8. $C_{iss} - V_{DS}$

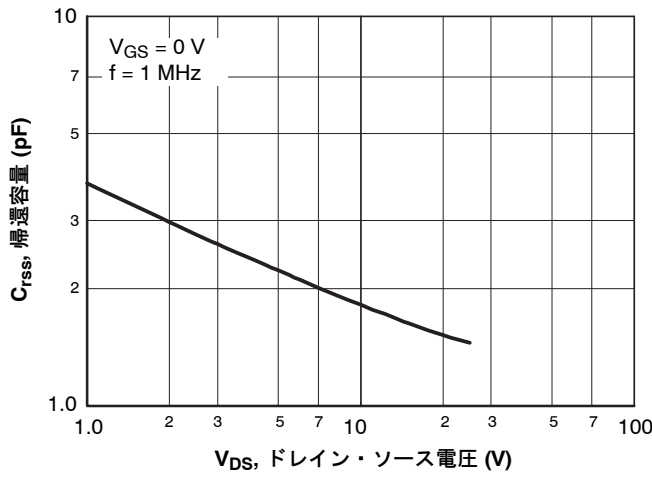


図 9. $C_{rss} - V_{DS}$

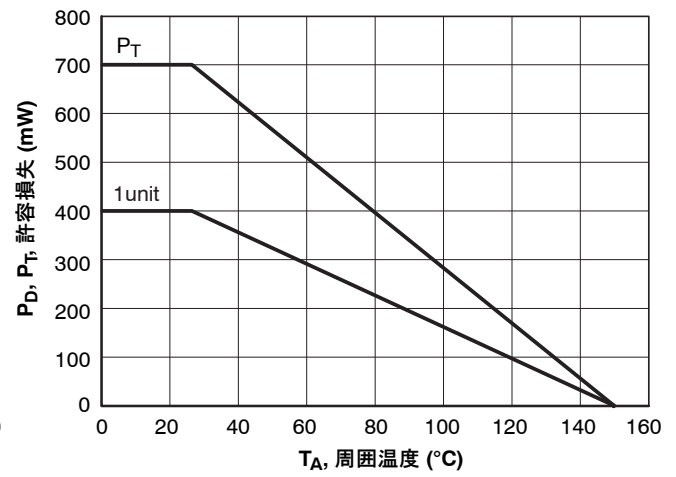
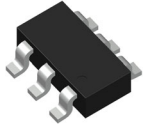
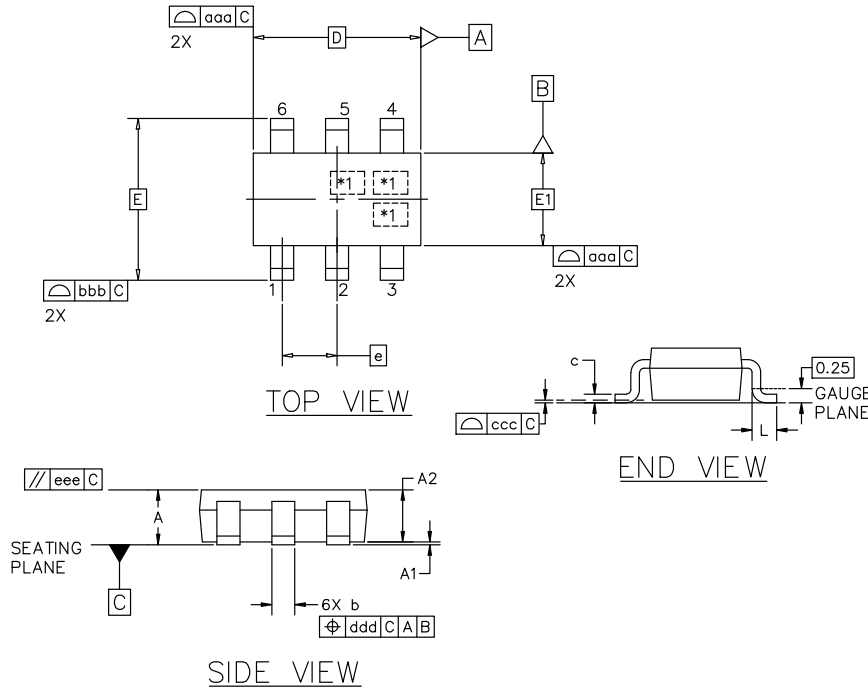


図 10. $P_D, P_T - T_A$



CPH6 2.90x1.60x0.90, 0.95P
CASE 318BD
ISSUE A

DATE 20 SEPT 2024

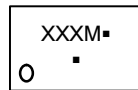


MILLIMETERS			
DIM	MIN	NOM	MAX
A	0.85	0.95	1.05
A1	0.00	0.05	0.10
A2	0.85	0.90	0.95
b	0.30	0.40	0.50
c	0.10	0.15	0.25
D	2.90 BSC		
E	2.80 BSC		
E1	1.60 BSC		
e	0.95 BSC		
L	0.10	0.20	0.30
TOLERANCE FORM AND POSITION			
aaa	0.10		
bbb	0.15		
ccc	0.05		
ddd	0.10		
eee	0.10		

NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 2018.
2. CONTROLLING DIMENSION: MILLIMETERS
3. *1 IS FOR LOT INDICATION

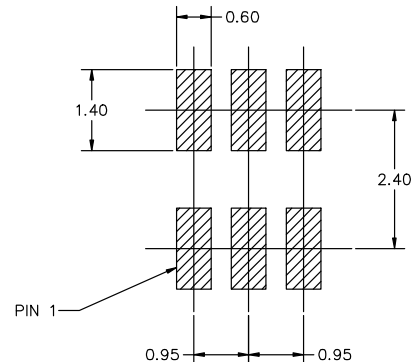
GENERIC
MARKING DIAGRAM*



XXX = Specific Device Code
M = Date Code
▪ = Pb-Free Package

(Note: Microdot may be in either location)

*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "▪", may or may not be present. Some products may not follow the Generic Marking.



RECOMMENDED MOUNTING FOOTPRINT

* For additional information on our Pb-Free strategy and soldering details, please download the onsemi Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.

DOCUMENT NUMBER:	98AON65440E	Electronic versions are uncontrolled except when accessed directly from the Document Repository. Printed versions are uncontrolled except when stamped "CONTROLLED COPY" in red.
DESCRIPTION:	CPH6 2.90x1.60x0.90, 0.95P	PAGE 1 OF 1

onsemi and onsemi are trademarks of Semiconductor Components Industries, LLC dba onsemi or its subsidiaries in the United States and/or other countries. onsemi reserves the right to make changes without further notice to any products herein. onsemi makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does onsemi assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. onsemi does not convey any license under its patent rights nor the rights of others.

onsemi, **Onsemi**, and other names, marks, and brands are registered and/or common law trademarks of Semiconductor Components Industries, LLC dba "**onsemi**" or its affiliates and/or subsidiaries in the United States and/or other countries. **onsemi** owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of **onsemi**'s product/patent coverage may be accessed at www.onsemi.com/site/pdf/Patent-Marking.pdf. **onsemi** reserves the right to make changes at any time to any products or information herein, without notice. The information herein is provided "as-is" and **onsemi** makes no warranty, representation or guarantee regarding the accuracy of the information, product features, availability, functionality, or suitability of its products for any particular purpose, nor does **onsemi** assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. Buyer is responsible for its products and applications using **onsemi** products, including compliance with all laws, regulations and safety requirements or standards, regardless of any support or applications information provided by **onsemi**. "Typical" parameters which may be provided in **onsemi** data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. **onsemi** does not convey any license under any of its intellectual property rights nor the rights of others. **onsemi** products are not designed, intended, or authorized for use as a critical component in life support systems or any FDA Class 3 medical devices or medical devices with a same or similar classification in a foreign jurisdiction or any devices intended for implantation in the human body. Should Buyer purchase or use **onsemi** products for any such unintended or unauthorized application, Buyer shall indemnify and hold **onsemi** and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that **onsemi** was negligent regarding the design or manufacture of the part. **onsemi** is an Equal Opportunity/Affirmative Action Employer. This literature is subject to all applicable copyright laws and is not for resale in any manner.

ADDITIONAL INFORMATION

TECHNICAL PUBLICATIONS:

Technical Library: www.onsemi.com/design/resources/technical-documentation
onsemi Website: www.onsemi.com

ONLINE SUPPORT: www.onsemi.com/support

For additional information, please contact your local Sales Representative at
www.onsemi.com/support/sales