



CPH3910

N-Channel JFET 25V, 20 to 40mA, 40mS, CPH3

ON Semiconductor®

<http://onsemi.com>

Applications

- For AM tuner RF amplification
- Low noise amplifier

Features

- VGDS: -25V max.
- |yfs|: 40mS typ.
- Ciss: 6.0pF typ.
- NF: 2.1dB typ.

Specifications

Absolute Maximum Ratings at Ta=25°C

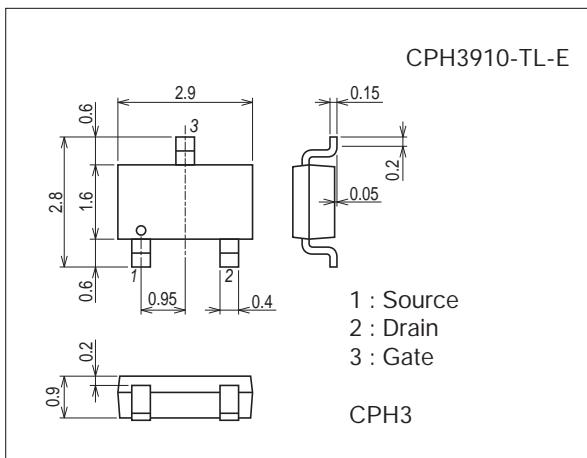
Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	VDSX		25	V
Gate-to-Drain Voltage	VGDS		-25	V
Gate Current	IG		10	mA
Drain Current	ID		50	mA
Allowable Power Dissipation	PD		400	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

Package Dimensions

unit : mm (typ)

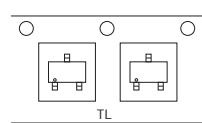
7015A-007



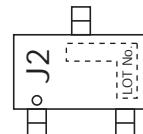
Product & Package Information

- Package : CPH3
- JEITA, JEDEC : SC-59, TO-236, SOT-23
- Minimum Packing Quantity : 3,000 pcs./reel

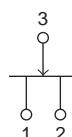
Packing Type: TL



Marking



Electrical Connection

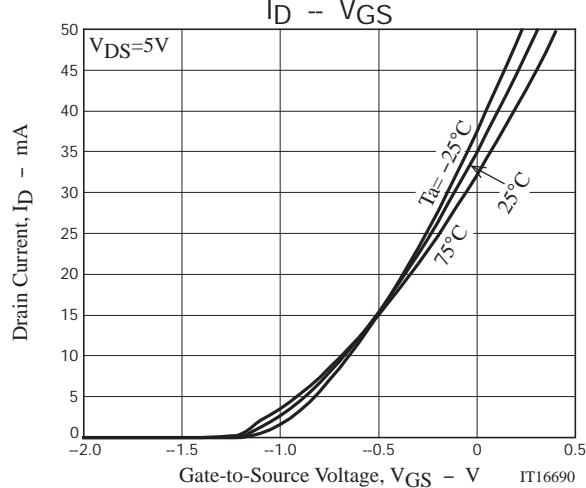
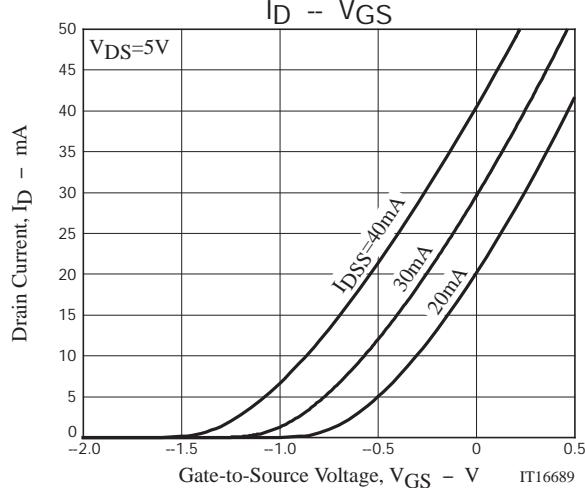
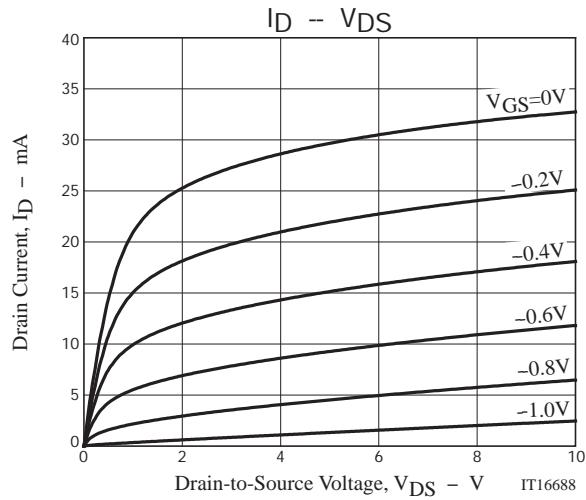
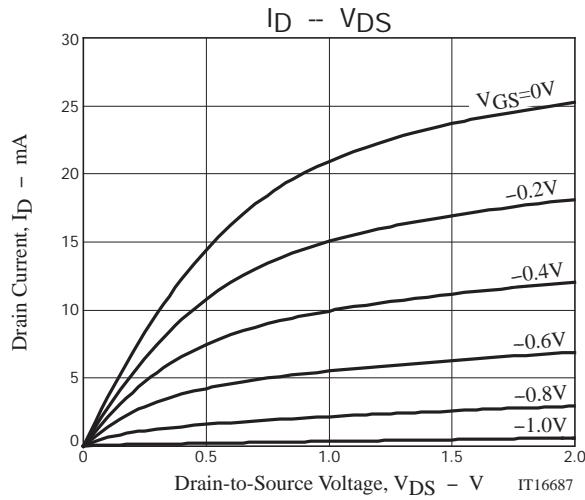


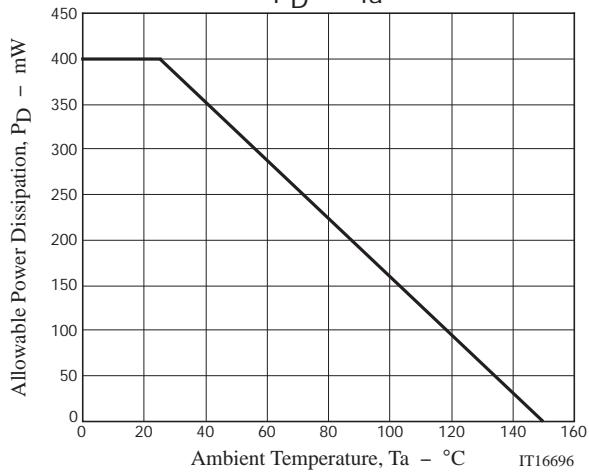
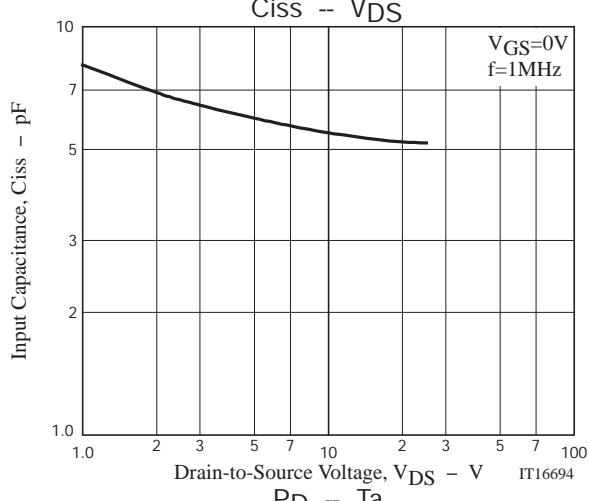
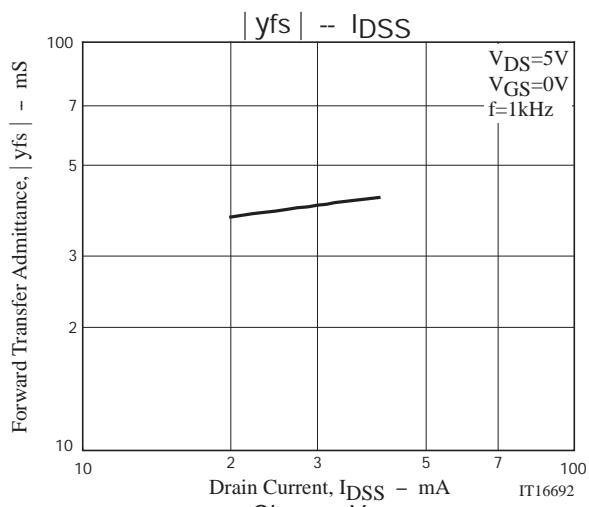
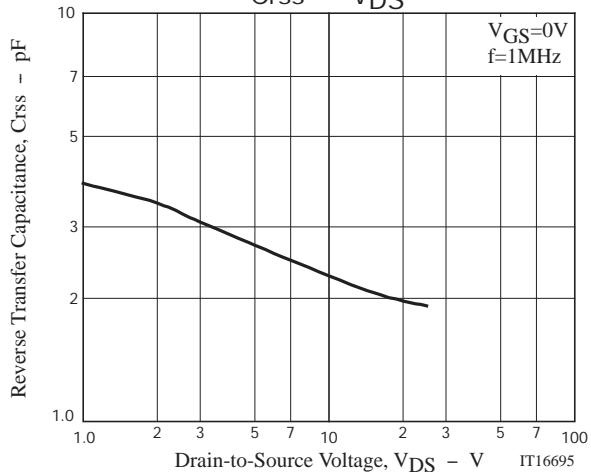
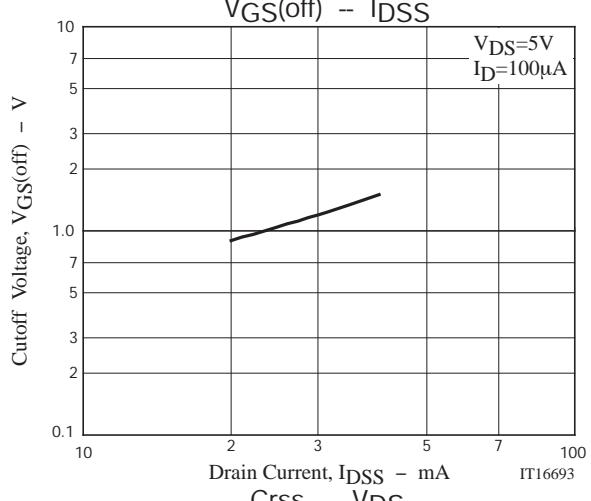
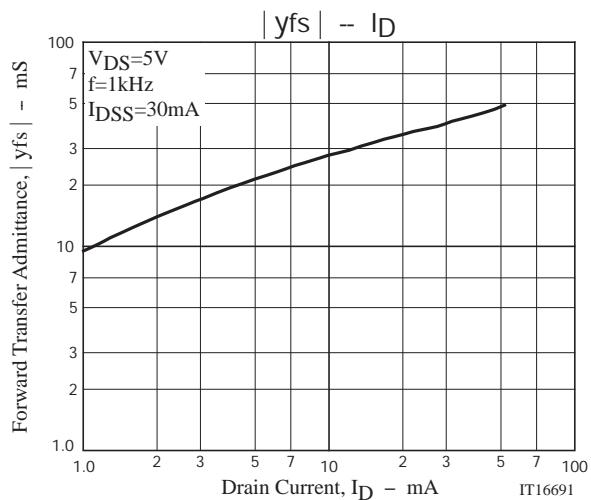
Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	$V_{(\text{BR})\text{GDS}}$	$I_G=-10\mu\text{A}, V_{\text{DS}}=0\text{V}$	-25			V
Gate Cutoff Current	I_{GSS}	$V_{\text{GS}}=-10\text{V}, V_{\text{DS}}=0\text{V}$			-1.0	nA
Cutoff Voltage	$V_{\text{GS}(\text{off})}$	$V_{\text{DS}}=5\text{V}, I_D=100\mu\text{A}$	-0.6	-1.2	-1.8	V
Drain Current	I_{DSS}	$V_{\text{DS}}=5\text{V}, V_{\text{GS}}=0\text{V}$	20		40	mA
Forward Transfer Admittance	$ y_{\text{fs}} $	$V_{\text{DS}}=5\text{V}, V_{\text{GS}}=0\text{V}, f=1\text{kHz}$	30	40		mS
Input Capacitance	C_{iss}	$V_{\text{DS}}=5\text{V}, V_{\text{GS}}=0\text{V}, f=1\text{MHz}$		6.0		pF
Reverse Transfer Capacitance	C_{rss}	$V_{\text{DS}}=5\text{V}, V_{\text{GS}}=0\text{V}, f=1\text{MHz}$		2.3		pF
Noise Figure	NF	$V_{\text{DS}}=5\text{V}, V_{\text{GS}}=0\text{V}, f=100\text{MHz}$		2.1	2.8	dB

Ordering Information

Device	Package	Shipping	memo
CPH3910-TL-E	CPH3	3,000pcs./reel	Pb Free



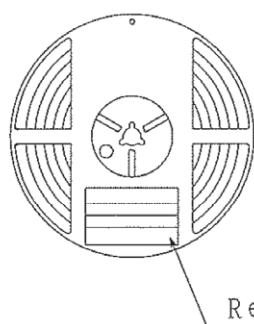


Embossed Taping Specification

CPH3910-TL-E

1. Packing Format

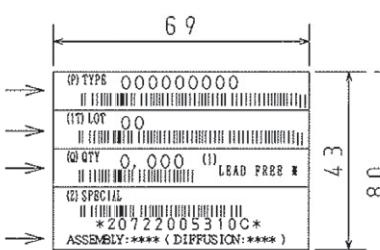
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
CPH3	CPH3	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Packing method

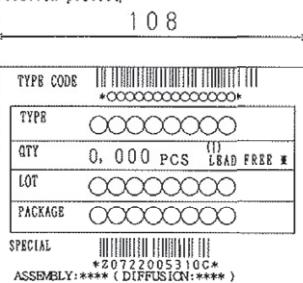
Reel label

Reel label, Inner box label

(unit:mm)

Outer box label

It is a label at the time of factory shipments.
The form of a label may change in physical distribution process.

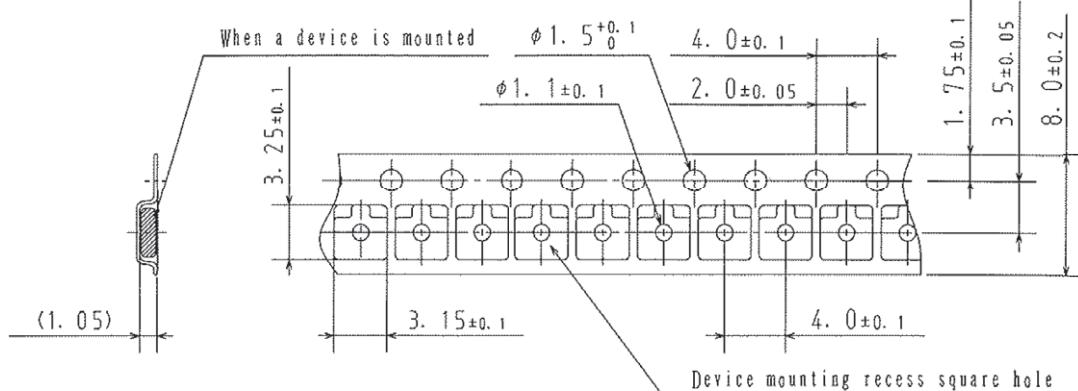


NOTE (1)
The LEAD FREE * description shows that the surface treatment of the terminal is lead free.

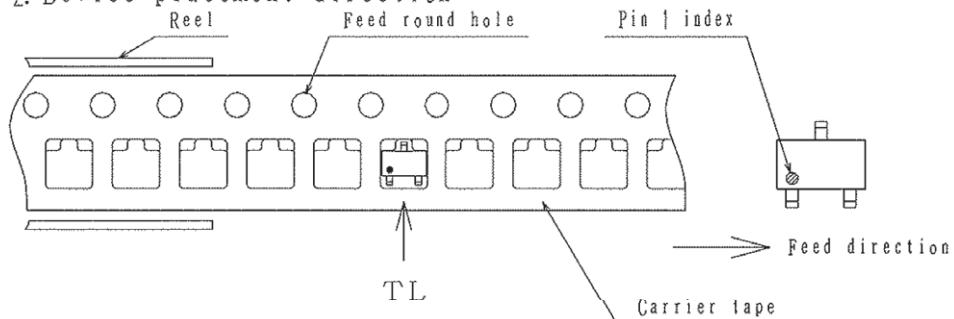
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

2-1. Carrier tape size (unit:mm)



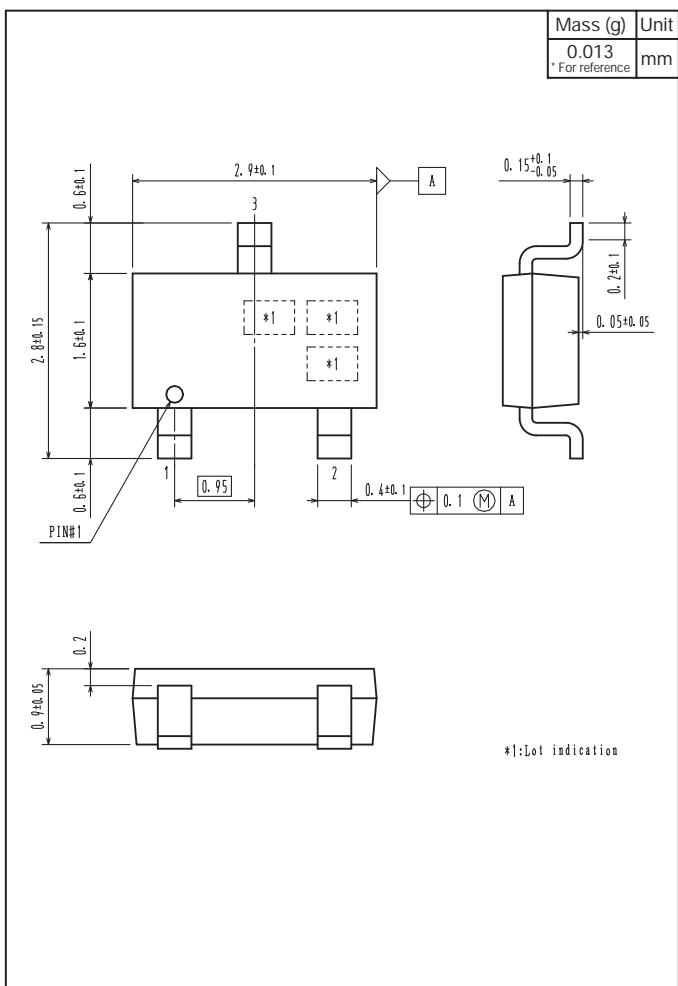
2-2. Device placement direction



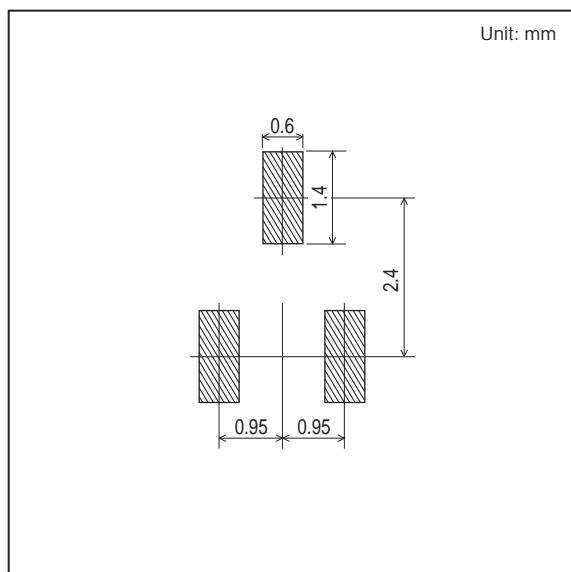
Those with one electrode terminal on the feed hole side.....TL

Outline Drawing

CPH3910-TL-E



Land Pattern Example



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