



# CPH5512

## PIN Diode

Dual parallel PIN Diode for VHF, UHF and AGC  
50V, 50mA,  $r_s = \text{typ } 5\Omega$ , CPH5

ON Semiconductor®

<http://onsemi.com>

### Features

- Composite type with 2 diodes contained in a CPH package currently in use, improving the mounting efficiency greatly
- Small interterminal capacitance ( $C=0.23\text{pF typ}$ )
- Small forward series resistance ( $r_s=5\Omega \text{ typ}$ )

### Specifications

Absolute Maximum Ratings at  $T_a=25^\circ\text{C}$

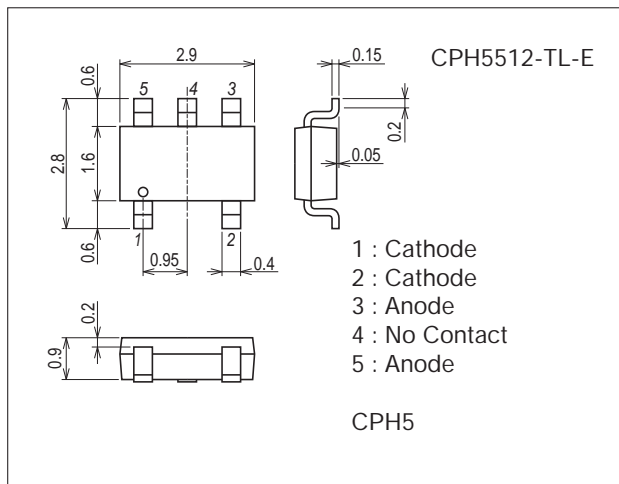
Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	$V_R$		50	V
Forward Current	$I_F$		50	A
Allowable Power Dissipation	$P$		350	V
Junction Temperature	$T_j$		125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ\text{C}$

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)

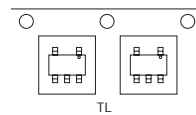
7017A-001



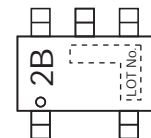
### Product & Package Information

- Package : CPH5
- JEITA, JEDEC : SC-74A, SOT-25
- Minimum Packing Quantity : 3,000 pcs./reel

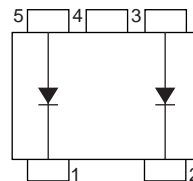
### Packing Type : TL



### Marking



### Electrical Connection



# CPH5512

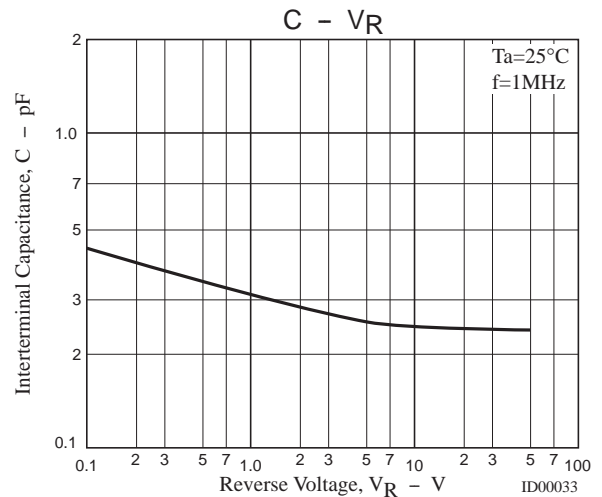
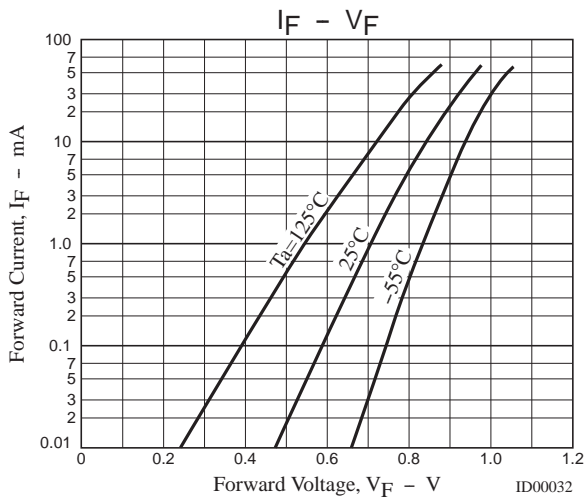
## Electrical Characteristics at Ta=25°C

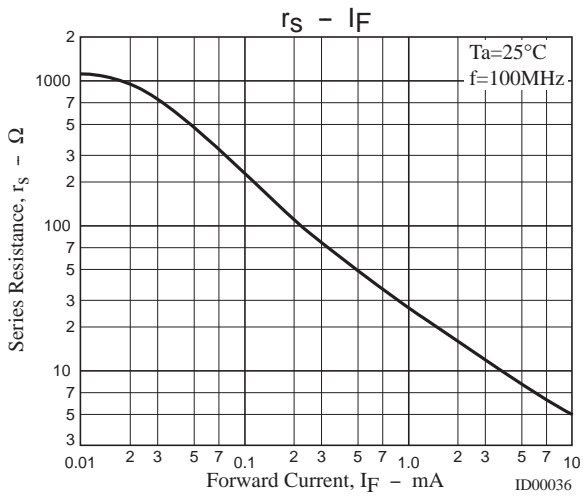
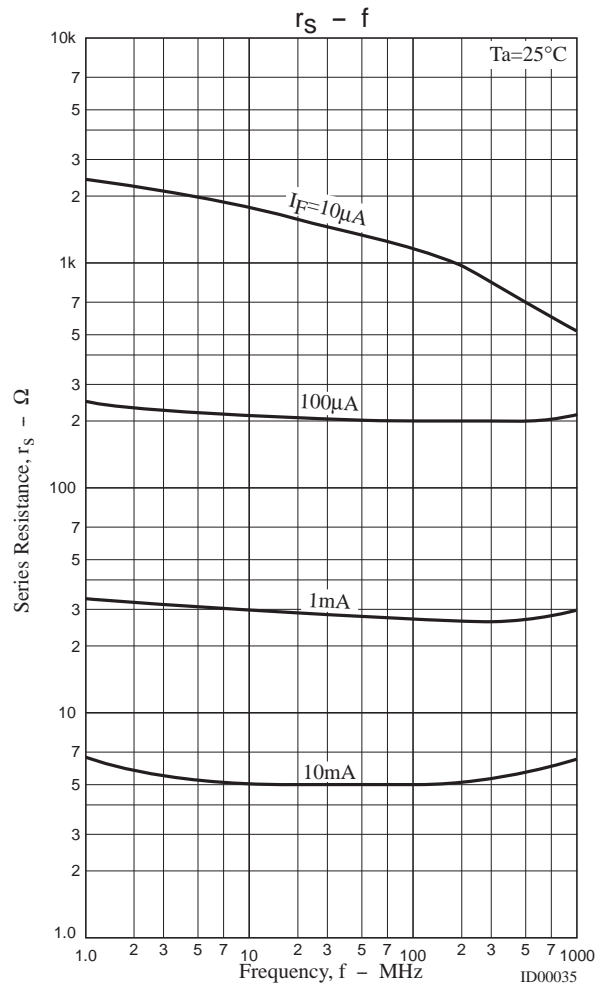
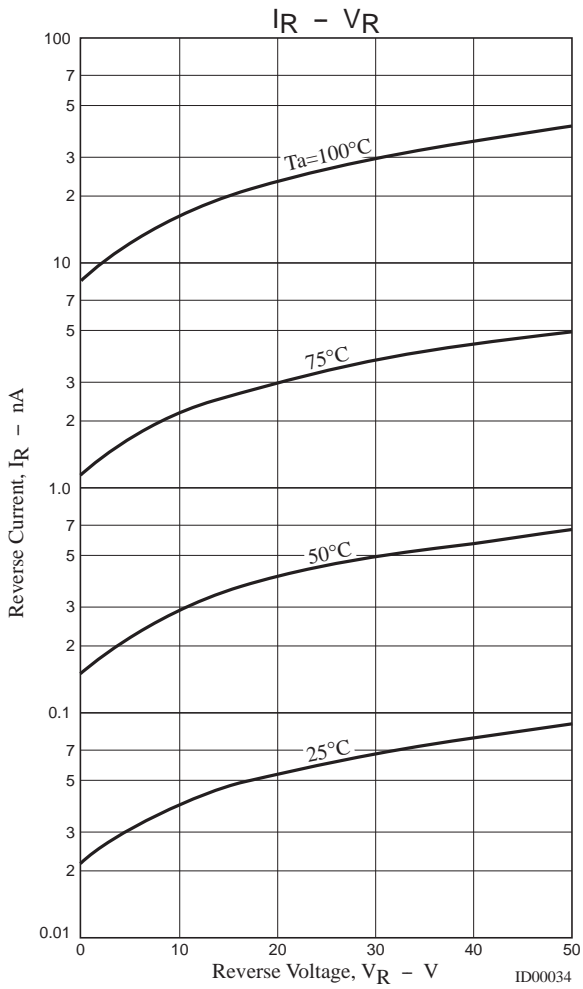
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=10\mu A$	50			V
Reverse Current	$I_R$	$V_R=50V$			0.1	$\mu A$
Forward Voltage	$V_F$	$I_F=50mA$		0.95		V
Interterminal Capacitance	C	$V_R=50V, f=1MHz$		0.23		pF
Series Resistance	$r_s$	$I_F=10mA, f=100MHz$		5		$\Omega$

The specifications shown above are for each individual diode.

## Ordering Information

Device	Package	Shipping	memo
CPH5512-TL-E	CPH5	3,000pcs./reel	Pb Free





Embossed Taping Specification

CPH5512-TL-E

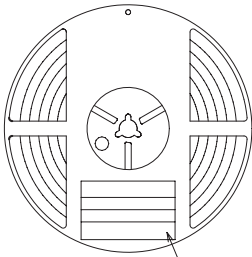
1. Packing Format

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)
CPH5	CPH6	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

Reel label, Inner box label  
(unit:mm)

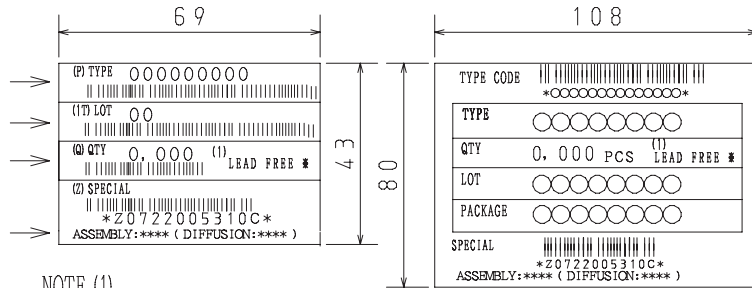
Outer box label  
It is a label at the time of factory shipments.  
The form of a label may change in physical distribution process.

Packing method



Reel label

Type No.  
LOT No.  
Quantity  
Origin



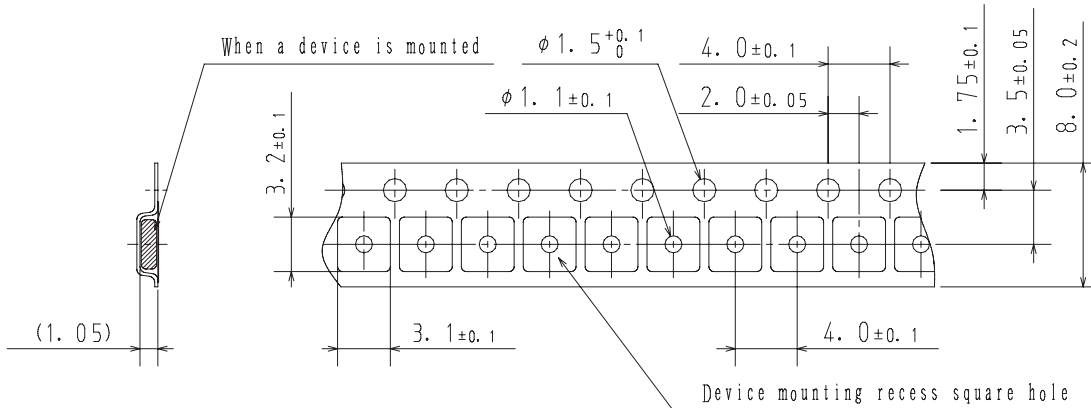
NOTE (1)

The LEAD FREE \* description shows that the surface treatment of the terminal is lead free.

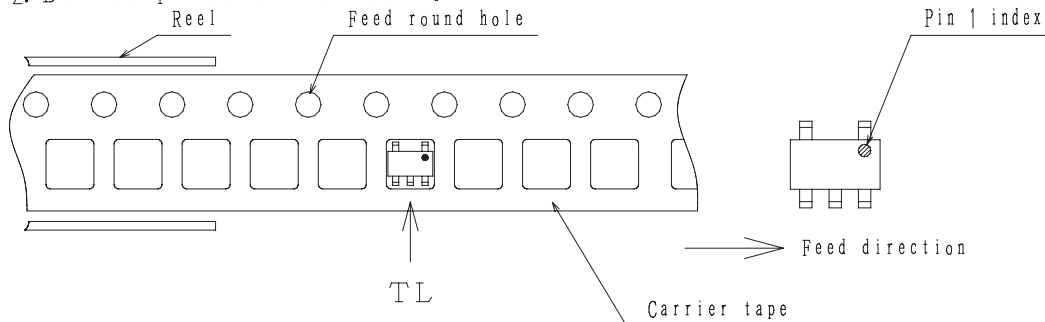
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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

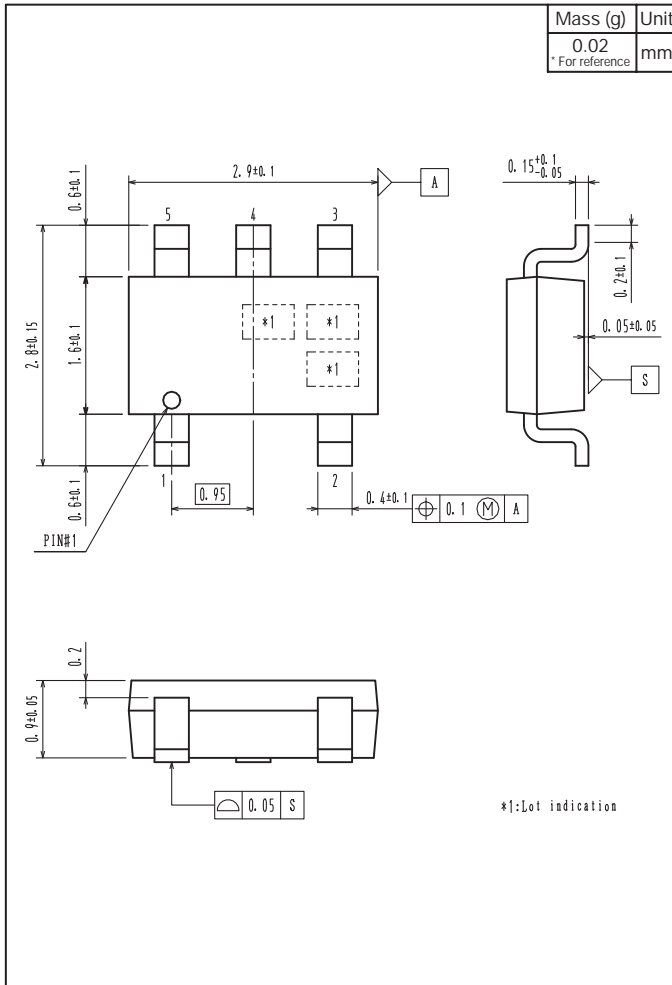


2-2. Device placement direction

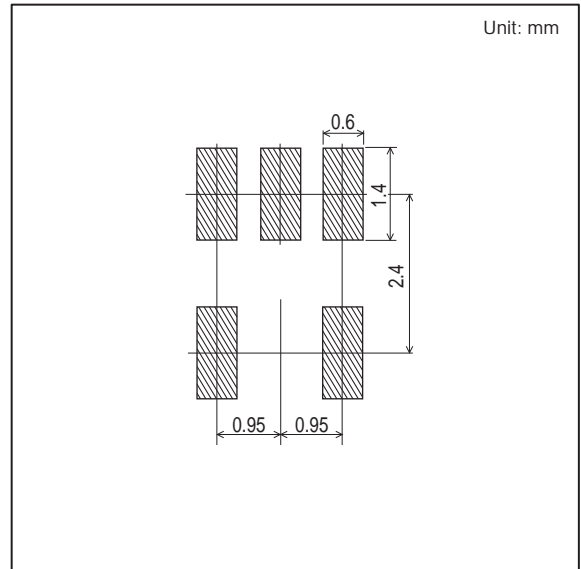


Those with pin 1 index on the feed hole side.....TL

Outline Drawing  
CPH5512-TL-E



Land Pattern Example



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