



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 $T_a=25^\circ\text{C}$

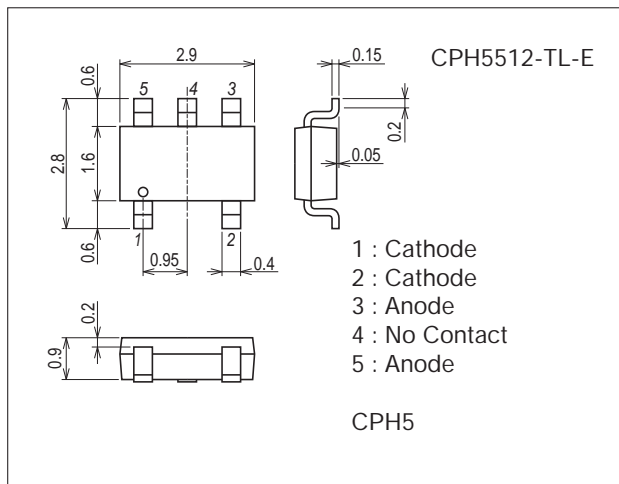
| Parameter | Symbol | Conditions | Ratings | Unit |
|-----------------------------|-----------|------------|-------------|------------------|
| Reverse Voltage | V_R | | 50 | V |
| Forward Current | I_F | | 50 | A |
| Allowable Power Dissipation | P | | 350 | V |
| Junction Temperature | T_j | | 125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

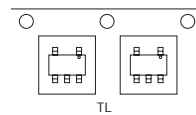
7017A-001



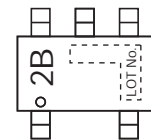
Product & Package Information

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

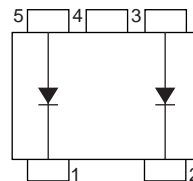
Packing Type : TL



Marking



Electrical Connection



CPH5512

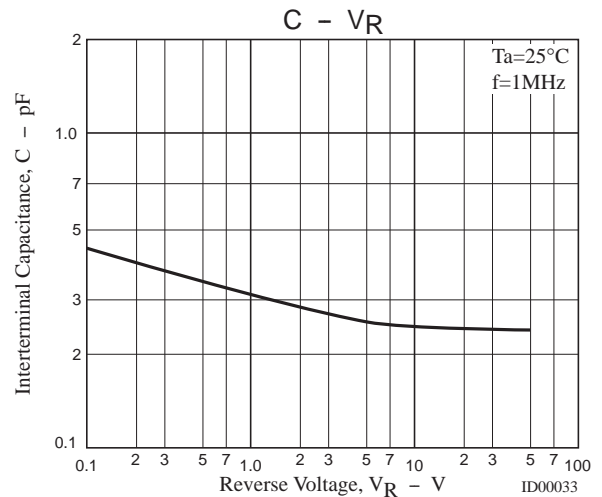
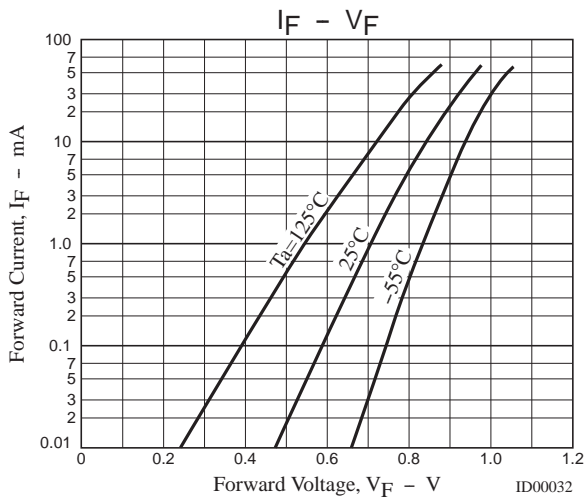
Electrical Characteristics at Ta=25°C

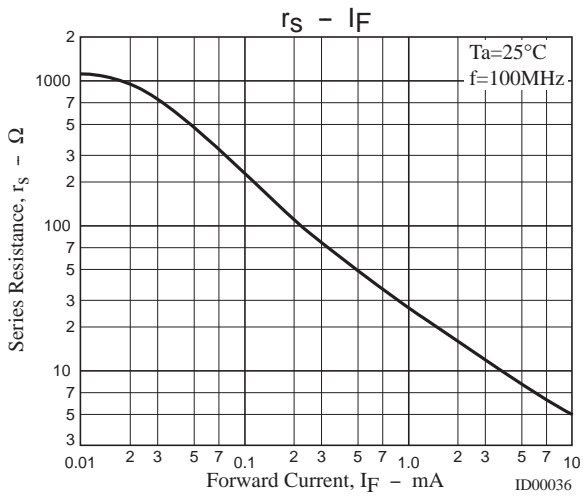
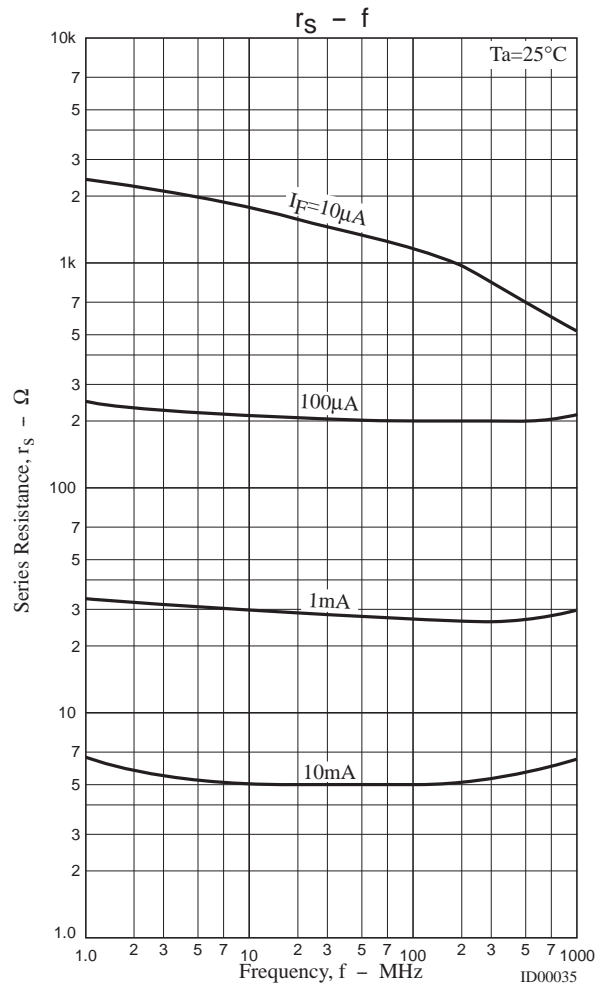
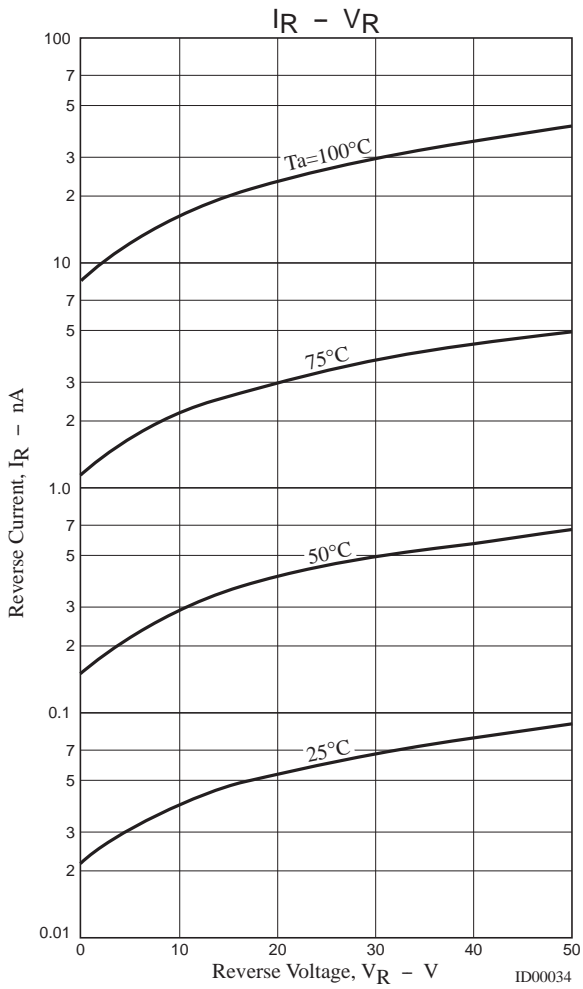
| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---------------------------|--------|----------------------|---------|------|-----|----------|
| | | | min | typ | max | |
| Reverse Voltage | V_R | $I_R=10\mu A$ | 50 | | | V |
| Reverse Current | I_R | $V_R=50V$ | | | 0.1 | μA |
| Forward Voltage | 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 | | Ω |

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

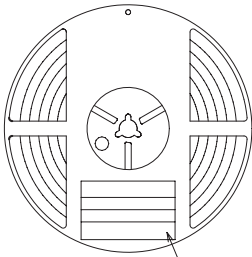
1. Packing Format

| 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)

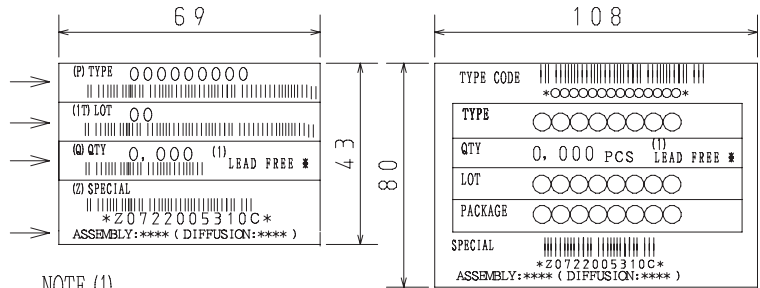
Outer box label
It is a label at the time of factory shipments.
The form of a label may change in physical distribution process.

Packing method



Reel label

Type No.
LOT No.
Quantity
Origin



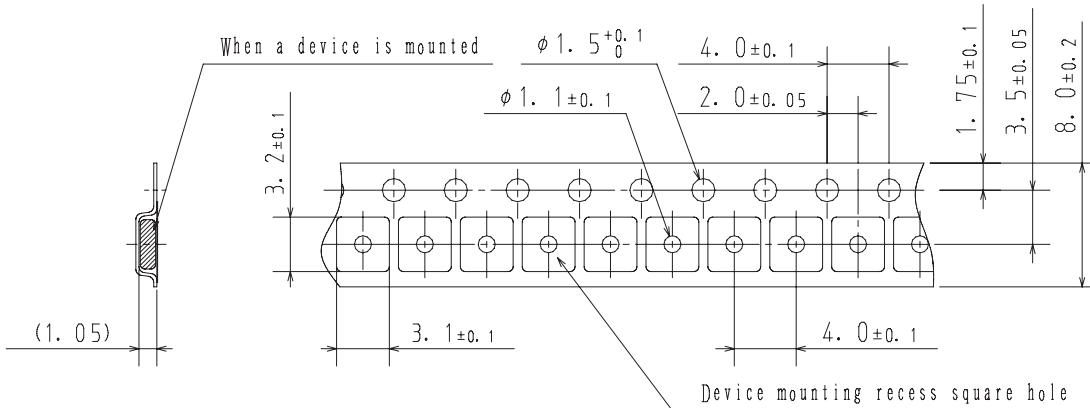
NOTE (1)

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

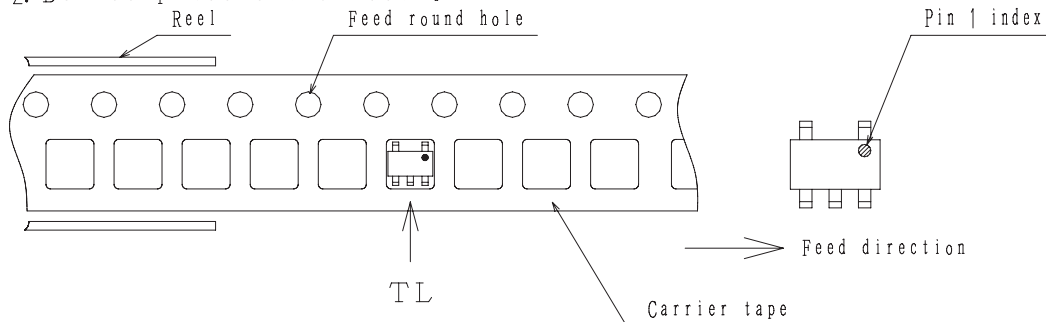
| Label | JEITA Phase |
|-------------|----------------|
| LEAD FREE 3 | JEITA Phase 3A |
| LEAD FREE 4 | JEITA Phase 3 |

2. Taping configuration

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



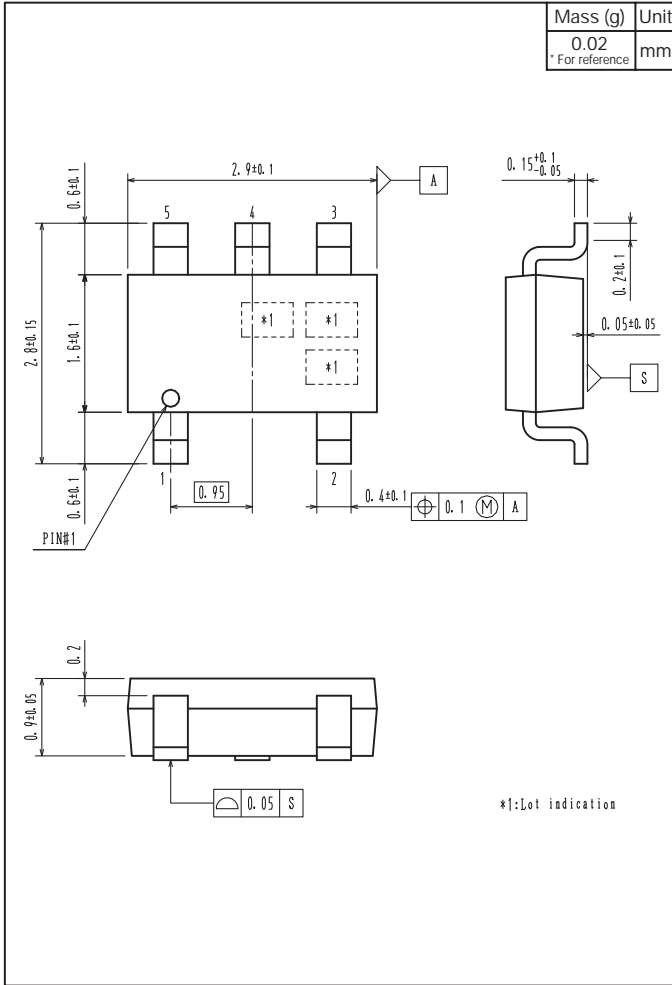
2-2. Device placement direction



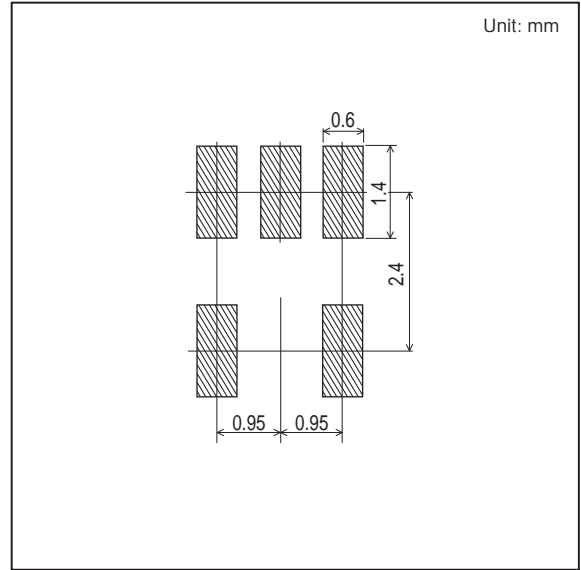
Those with pin 1 index on the feed hole side.....TL

CPH5512

Outline Drawing CPH5512-TL-E



Land Pattern Example



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