# ON Semiconductor

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**Ordering number : EN4511D**

# 1SV264

## PIN Diode

### Dual series PIN Diode for VHF, UHF and AGC 50V, 50mA, $r_S$=typ 2.5Ω, MCP

ON Semiconductor®

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## Features

- Series connection of 2 elements in an ultlasmall package facilitates high-density mounting and permits 1SV264-applied equipment to be made smaller
- Small interterminal capacitance(C=0.23pF typ)
- Small forward series resistance($r_S$=2.5Ω typ)

## Specifications

### Absolute Maximum Ratings at Ta=25°C

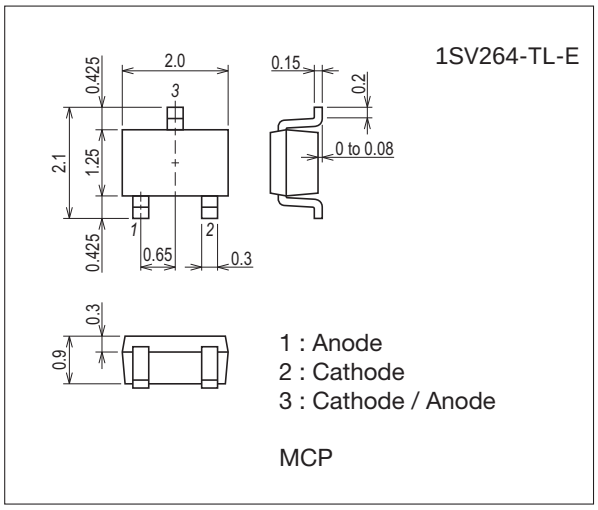
| Parameter | Symbol | Conditions | Ratings | Unit |
|---|---|---|---|---|
| Reverse Voltage | $V_R$ | | 50 | V |
| Forward Current | $I_F$ | | 50 | mA |
| Allowable Power Dissipation | P | | 100 | mW |
| Junction Temperature | Tj | | 125 | °C |
| Storage Temperature | Tstg | | −55 to +125 | °C |

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)

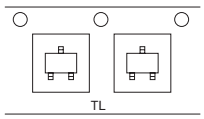
7023A-007



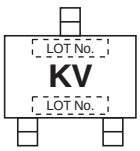

### Product & Package Information

- Package : MCP
- JEITA, JEDEC : SC-70, SOT-323
- Minimum Packing Quantity : 3,000 pcs./reel

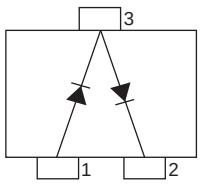
### Packing Type: TL




### Marking




### Electrical Connection



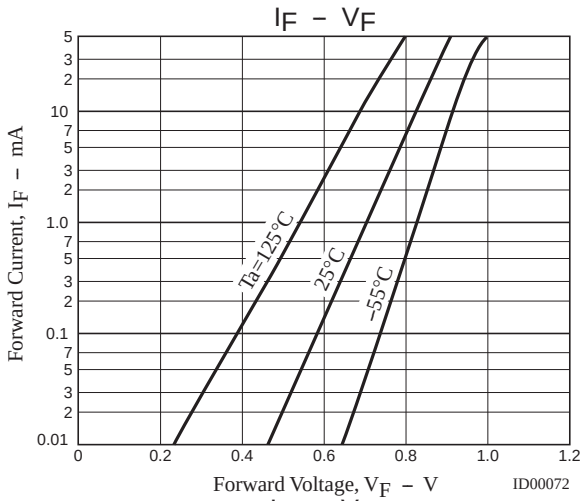
## Electrical Characteristics at Ta=25°C

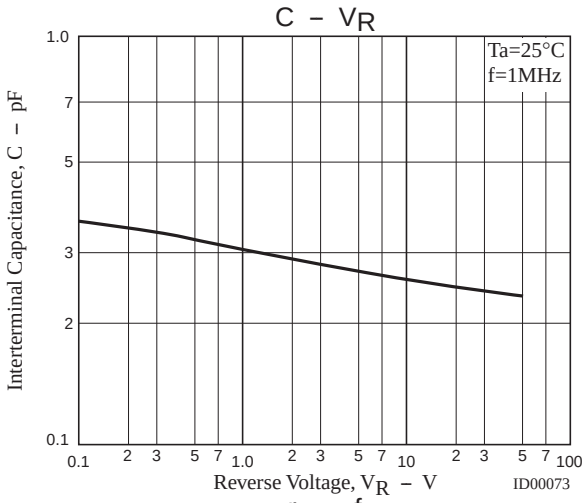
| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---|---|---|---|---|---|---|
| | | | min | typ | max | |
| Reverse Voltage | $V_R$ | $I_R$=10μA | 50 | | | V |
| Reverse Current | $I_R$ | $V_R$=50V | | | 0.1 | μA |
| Forward Voltage | $V_F$ | $I_F$=50mA | | 0.91 | 0.95 | V |
| Interterminal Capacitance | C | $V_R$=50V, f=1MHz | | 0.23 | 0.4 | pF |
| Series Resistance | $r_s$ | $I_F$=5mA, f=100MHz | | 4.0 | 8.0 | Ω |
| | | $I_F$=10mA, f=100MHz | | 2.5 | 4.5 | Ω |

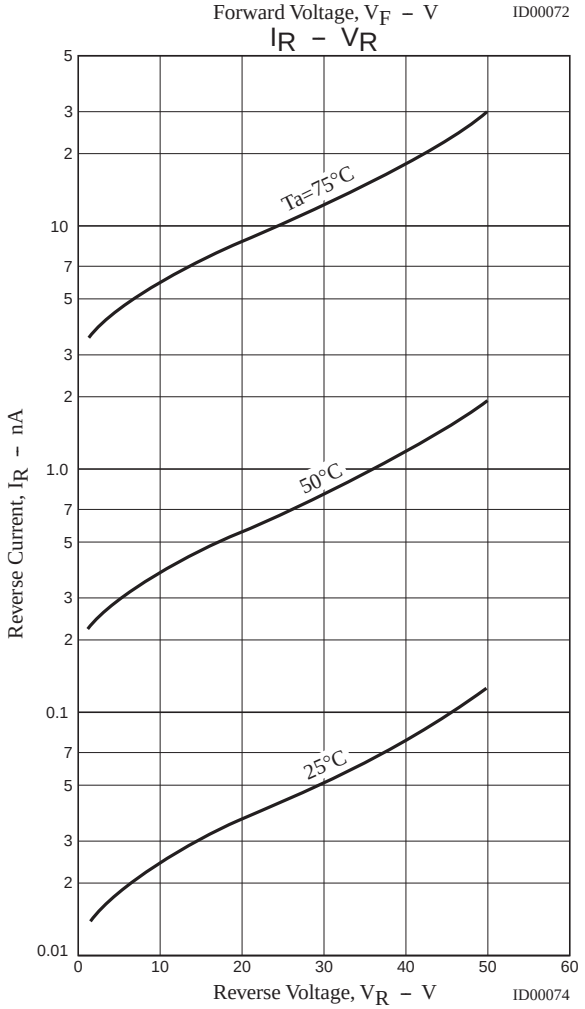
Note : The specifications shown above are for each individual diode.

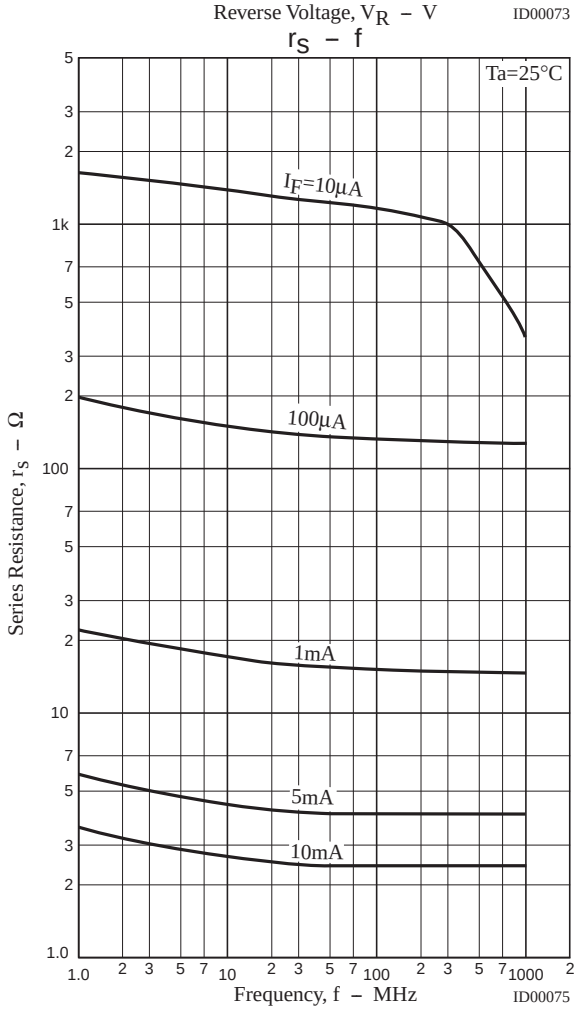
## Ordering Information

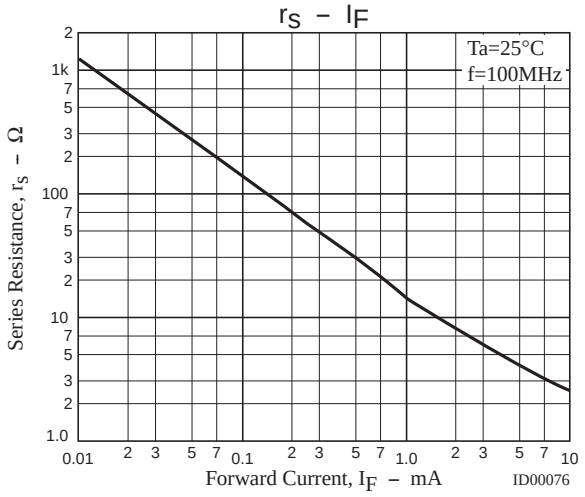
| Device | Package | Shipping | memo |
|---|---|---|---|
| 1SV264-TL-E | MCP | 3,000pcs./reel | Pb Free |


IF – VF
Forward Current, IF – mA
Forward Voltage, VF – V
Ta=125°C
25°C
–55°C
ID00072


C – VR
Interterminal Capacitance, C – pF
Reverse Voltage, VR – V
Ta=25°C
f=1MHz
ID00073


IR – VR
Reverse Current, IR – nA
Reverse Voltage, VR – V
Ta=75°C
50°C
25°C
ID00074


rS – f
Series Resistance, rS – Ω
Frequency, f – MHz
Ta=25°C
IF=10μA
100μA
1mA
5mA
10mA
ID00075


rS – IF
Series Resistance, rS – Ω
Forward Current, IF – mA
Ta=25°C
f=100MHz
ID00076

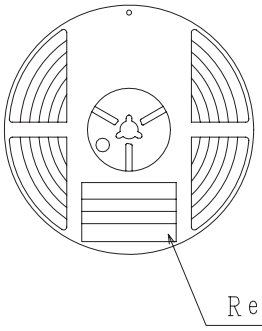
**Embossed Taping Specification**

1SV264-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) |
| MCP | MCP | 3,000 | 15,000 | 90,000 | 5 reels contained<br>Dimensions:mm (external)<br>183×72×185 | 6 inner boxes contained<br>Dimensions:mm (external)<br>440×195×210 |

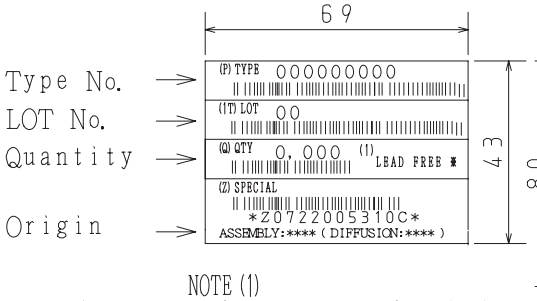
Packing method



Reel label

Reel label, Inner box label

(unit:mm)




Type No.

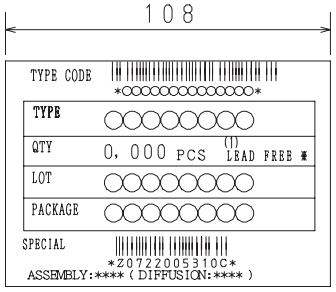
LOT No.

Quantity

Origin

Outer box label

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



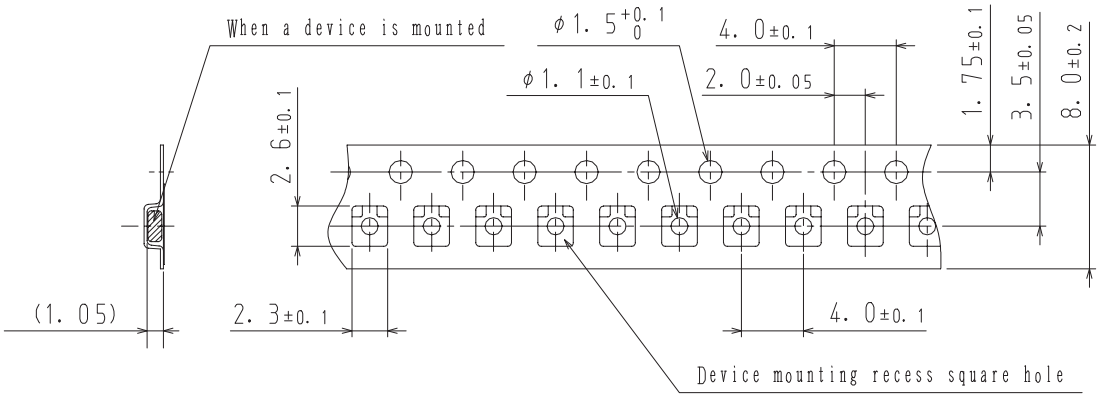

NOTE (1)

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

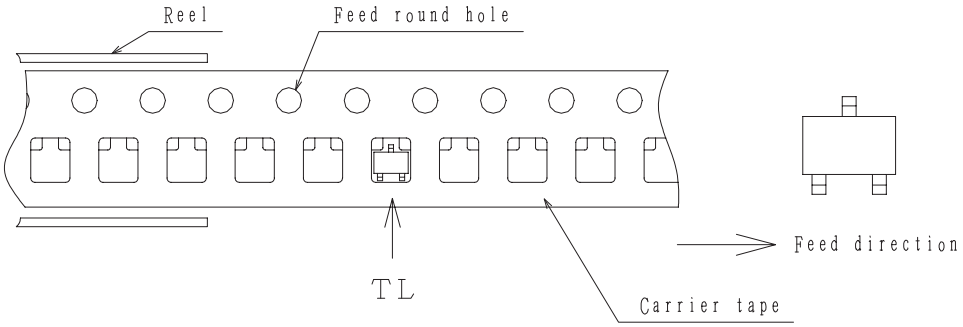
| Label | JEITA Phase |
|---|---|
| LEAD FREE 3 | JEITA Phase 3A |
| LEAD FREE 4 | JEITA Phase 3 |

## 2. Taping configuration

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



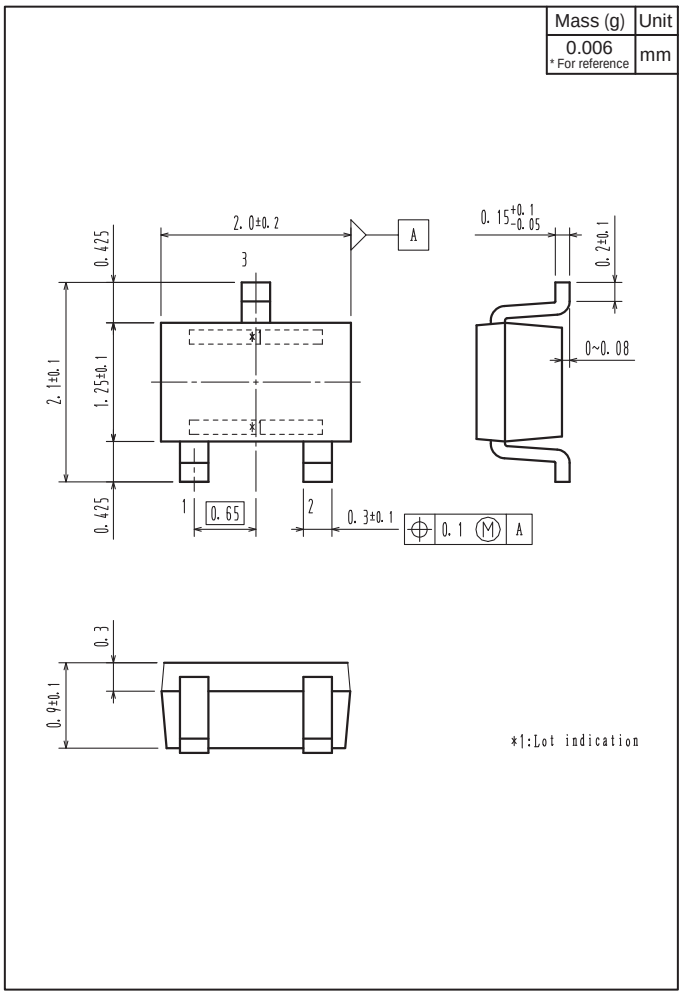

### 2-2. Device placement direction




Those with oen electrode terminal on the feed hole side·····TL

## Outline Drawing

1SV264-TL-E




## Land Pattern Example