



# 1SV263 — Silicon Epitaxial Type Pin Diode for VHF, UHF, AGC Applications

## Features

- Ultrasmall-sized package facilitates high-density mounting and permits 1SV263-applied equipment to be made smaller
- Small interterminal capacitance ( $C=0.23\text{pF}$  typ)
- Small forward series resistance ( $r_s=2.5\Omega$  typ)

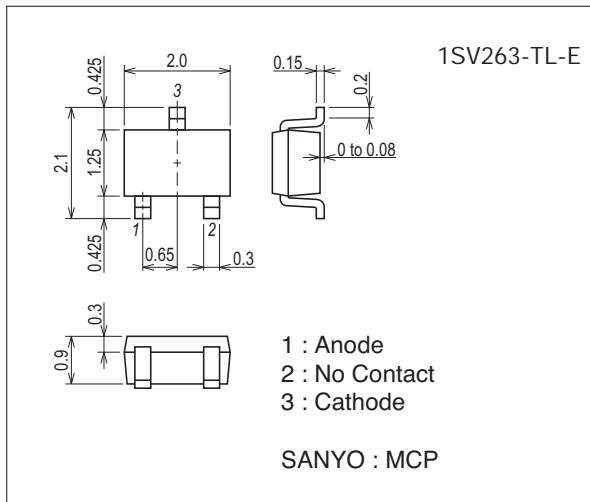
## Specifications

### 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          | mA               |
| Allowable Power Dissipation | P         |            | 100         | mW               |
| Junction Temperature        | $T_j$     |            | 125         | $^\circ\text{C}$ |
| Storage Temperature         | $T_{stg}$ |            | -55 to +125 | $^\circ\text{C}$ |

## Package Dimensions

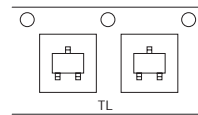
unit : mm (typ)  
7023A-005



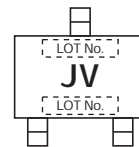
## Product & Package Information

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

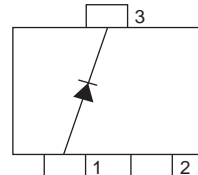
## Packing Type: TL



## Marking



## Electrical Connection



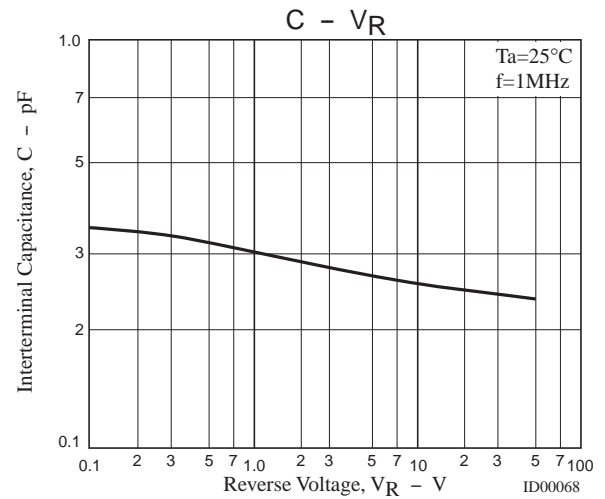
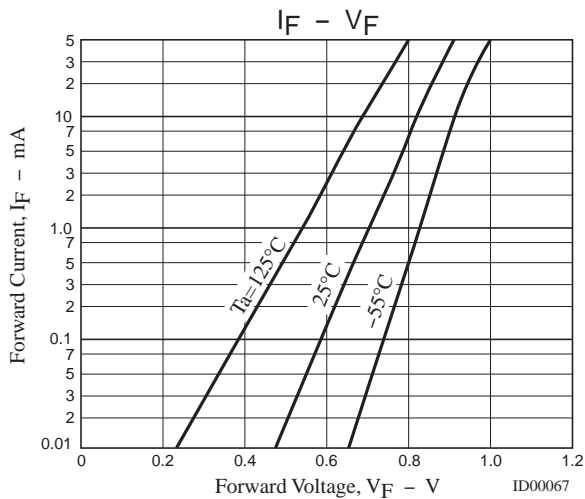
# 1SV263

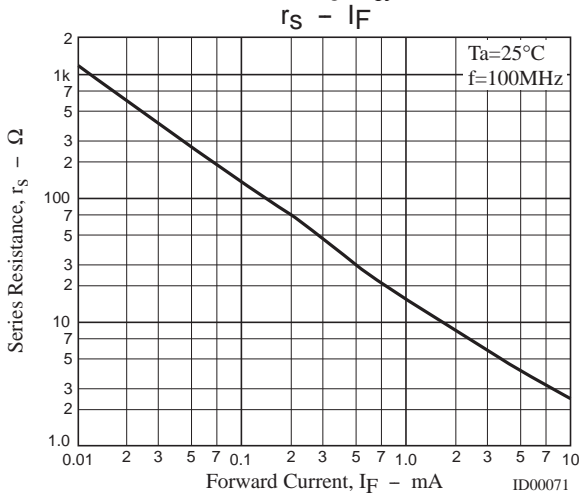
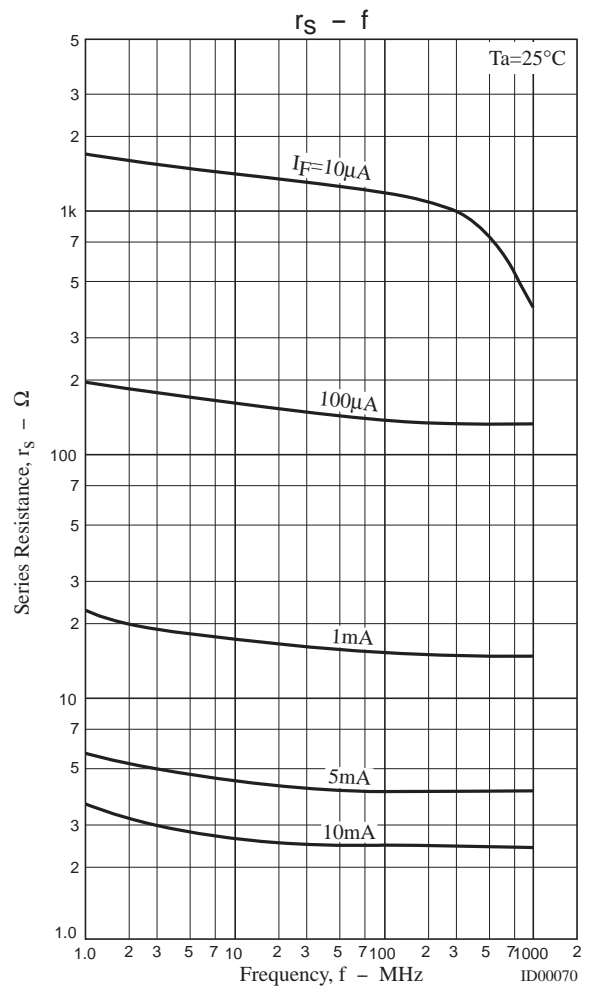
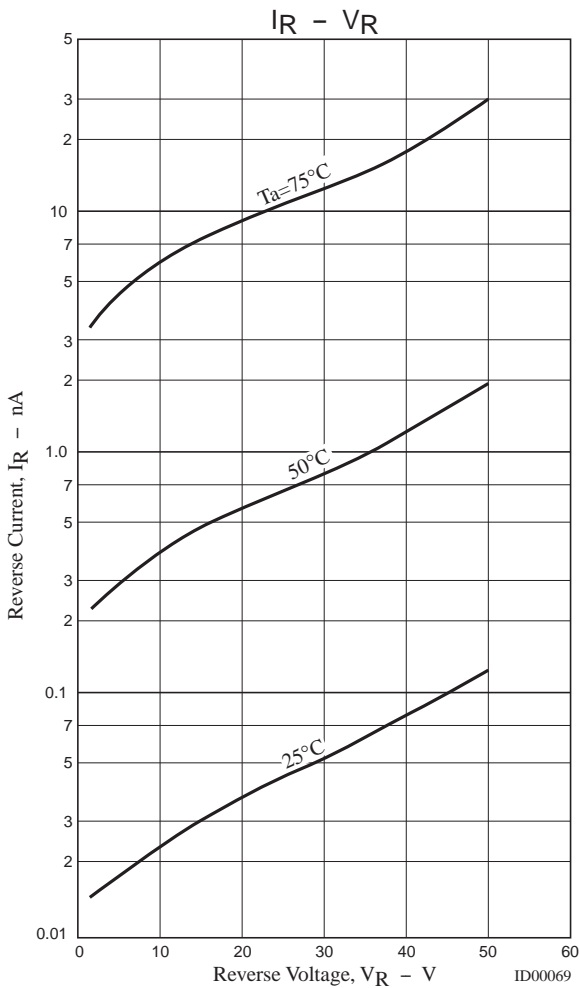
## Electrical Characteristics at Ta=25°C

| 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           | $V_F$  | $I_F=50mA$           |         | 0.91 | 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  | $\Omega$ |
|                           |        | $I_F=10mA, f=100MHz$ |         | 2.5  | 4.5  | $\Omega$ |

## Ordering Information

| Device      | Package | Shipping       | memo    |
|-------------|---------|----------------|---------|
| 1SV263-TL-E | MCP     | 3,000pcs./reel | Pb Free |





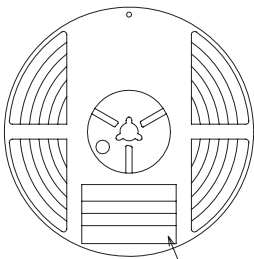
Embossed Taping Specification

1SV263-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 |

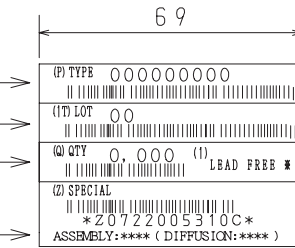
Packing method



Reel label

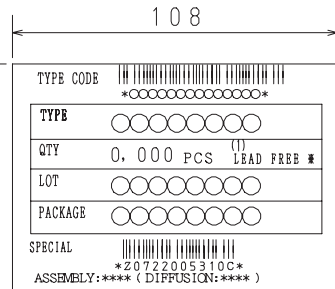
Type No.  
LOT No.  
Quantity  
Origin

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.



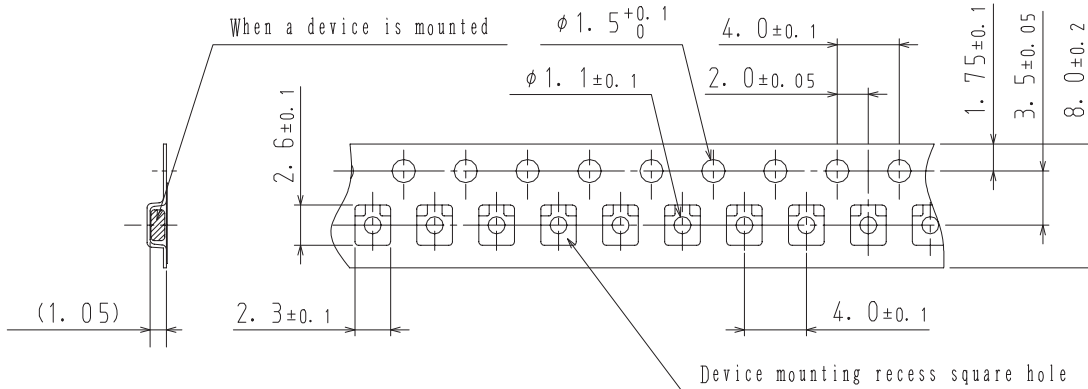
NOTE (1)

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

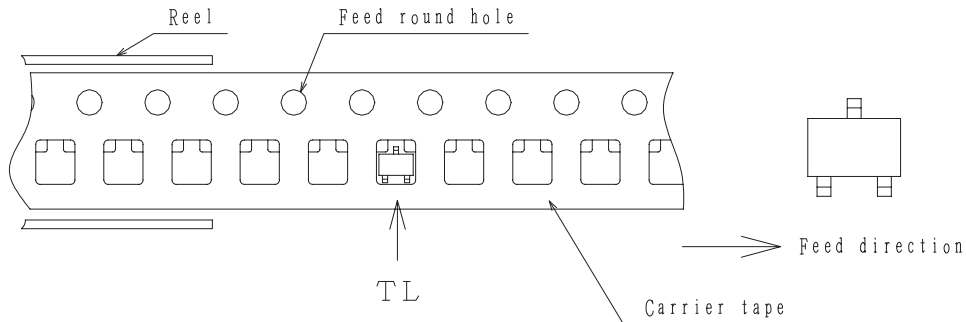
| Label       | JEITA Phase    |
|-------------|----------------|
| LEAD FREE 3 | JEITA Phase 3A |
| LEAD FREE 4 | JEITA Phase 3  |

2. Taping configuration

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



2-2. Device placement direction



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

# 1SV263

## Outline Drawing

1SV263-TL-E



## Land Pattern Example



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