



1SV263

PIN Diode

Single PIN Diode for VHF, UHF and AGC
50V, 50mA, r_s =typ 2.5 Ω , MCP

ON Semiconductor®

<http://onsemi.com>

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

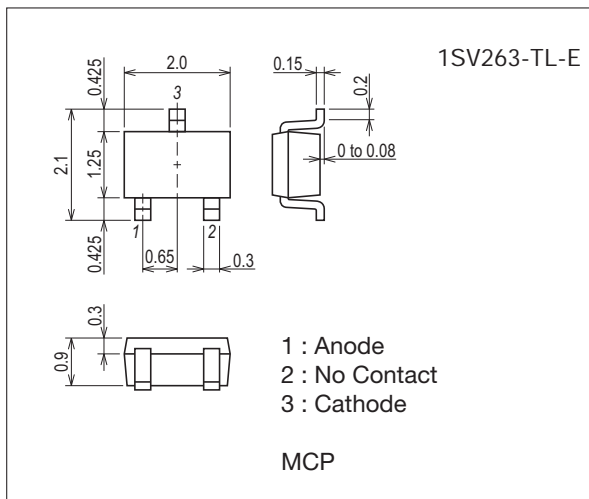
| Parameter | Symbol | Conditions | Ratings | Unit |
|-----------------------------|-----------|------------|-------------|------------------|
| Reverse Voltage | V_R | | 50 | V |
| Forward Current | I_F | | 50 | mA |
| Allowable Power Dissipation | P | | 100 | mW |
| Junction Temperature | T_j | | 125 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | | -55 to +125 | $^\circ\text{C}$ |

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)

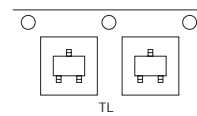
7023A-005



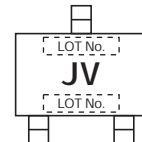
Product & Package Information

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

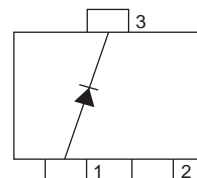
Packing Type: TL



Marking



Electrical Connection



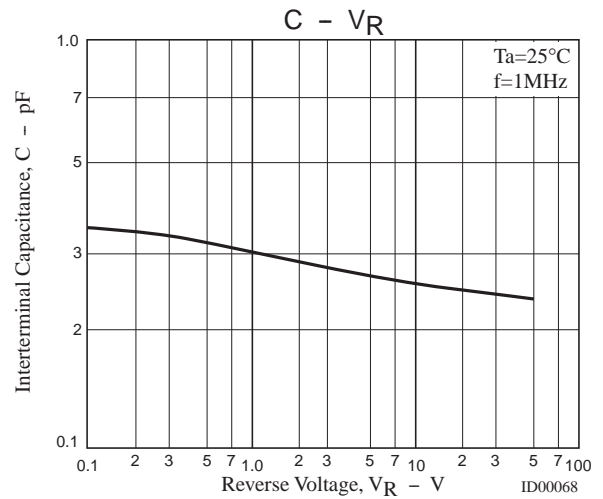
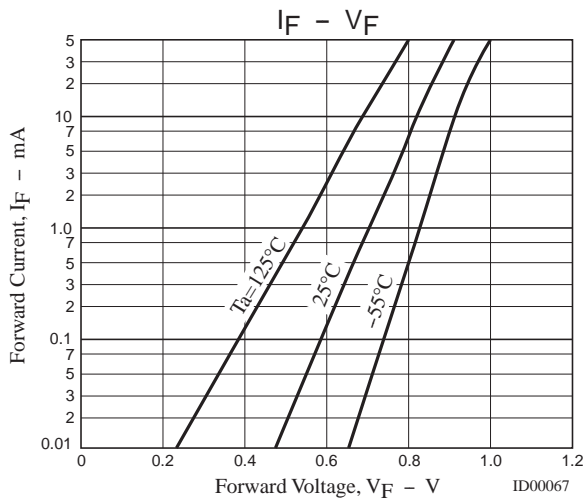
1SV263

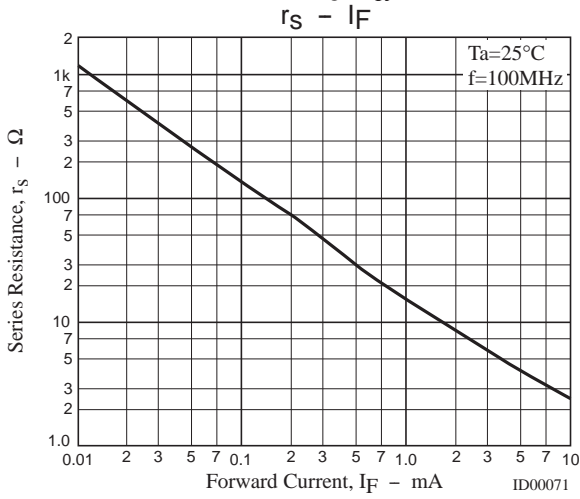
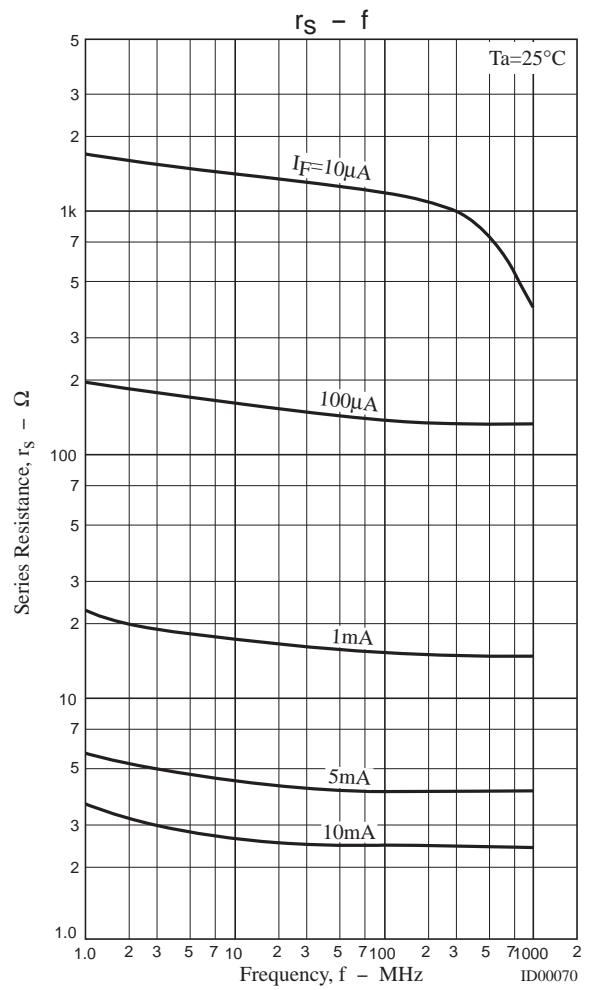
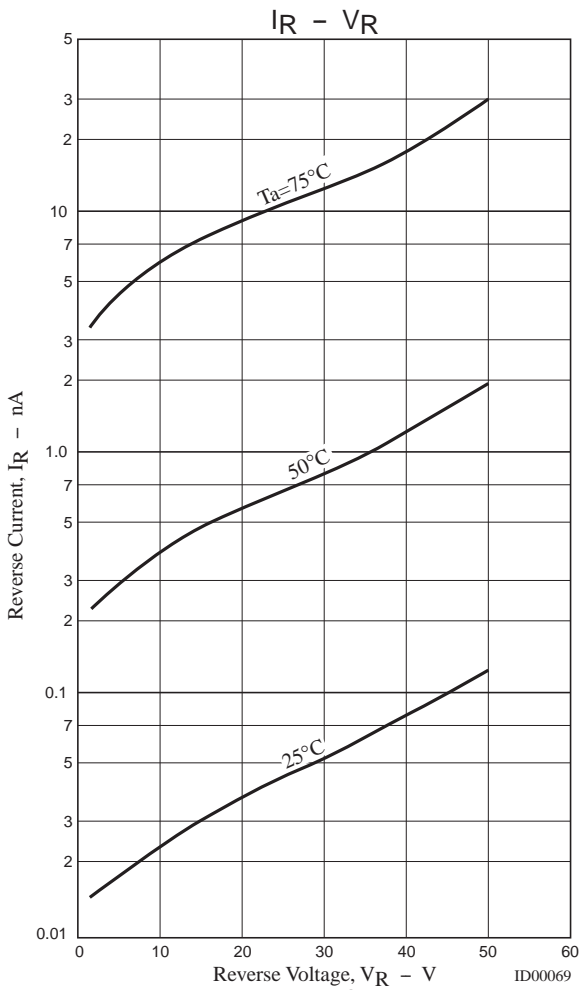
Electrical Characteristics at $T_a=25^\circ\text{C}$

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

Ordering Information

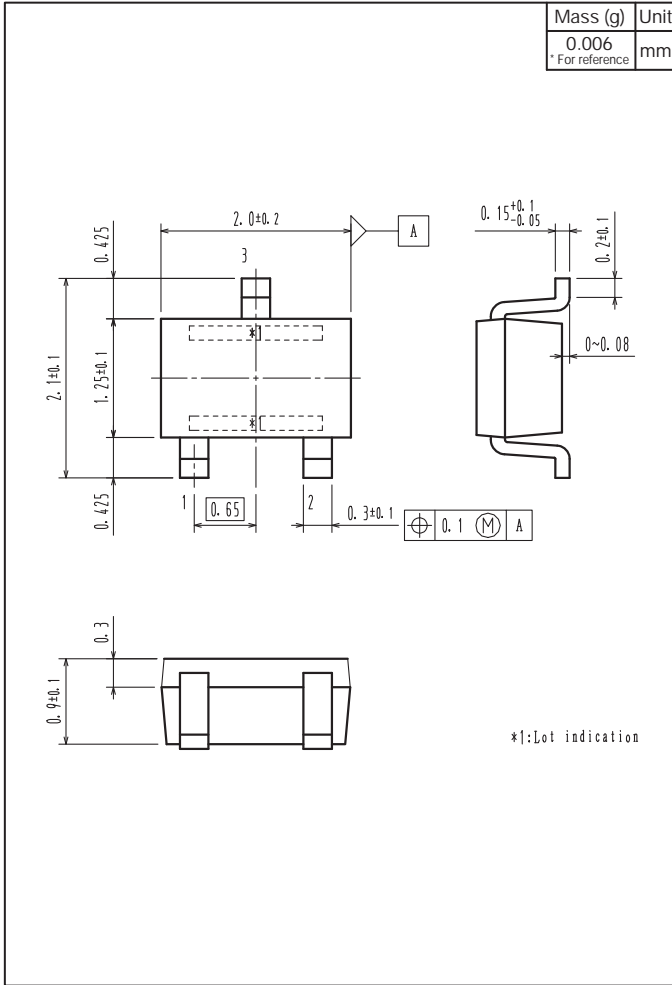
| Device | Package | Shipping | memo |
|-------------|---------|----------------|---------|
| 1SV263-TL-E | MCP | 3,000pcs./reel | Pb Free |



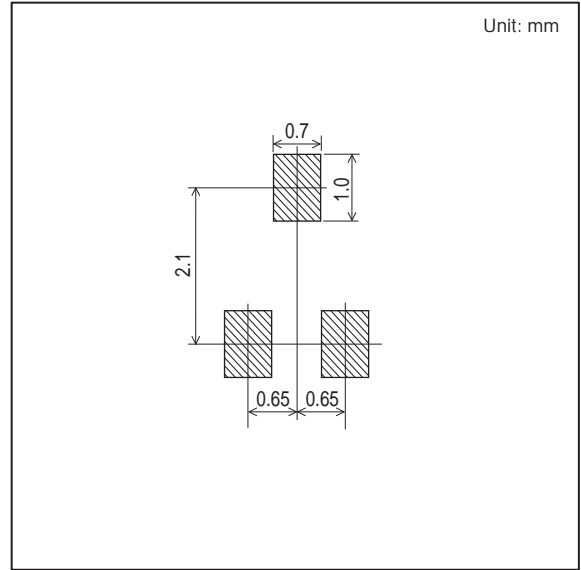


Outline Drawing

1SV263-TL-E



Land Pattern Example



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