



# 1SV272

## Silicon Epitaxial Type Transmitting, Receiving Antenna-switch Use PIN Diode

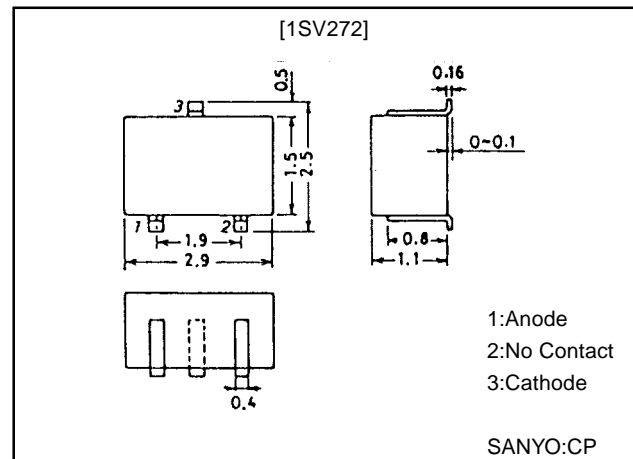
### Features

- Series connection of 2 elements in a Very small-sized package facilitates high-density mounting and permits 1SV272-applied equipment to be made smaller.
- Small interterminal capacitance ( $C=0.6\text{pF}$  typ).
- Small forward series resistance ( $r_s=0.5\Omega$  typ).

### Package Dimensions

unit:mm

1148A



### Specifications

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

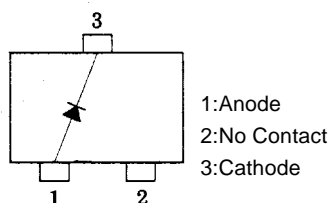
| Parameter                   | Symbol           | Conditions | Ratings     | Unit             |
|-----------------------------|------------------|------------|-------------|------------------|
| Reverse Voltage             | $V_R$            |            | 50          | V                |
| Forward Current             | $I_F$            |            | 100         | mA               |
| Allowable Power Dissipation | P                |            | 150         | mW               |
| Junction Temperature        | $T_j$            |            | 125         | $^\circ\text{C}$ |
| Storage Temperature         | $T_{\text{stg}}$ |            | -55 to +125 | $^\circ\text{C}$ |

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

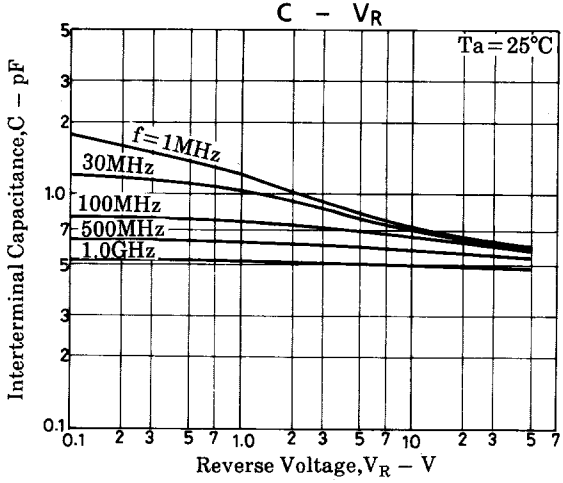
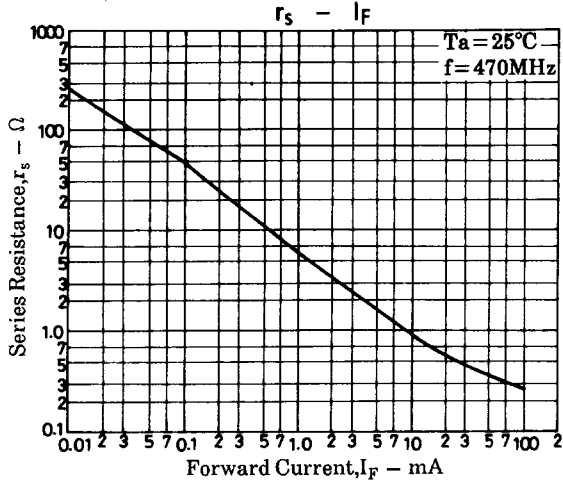
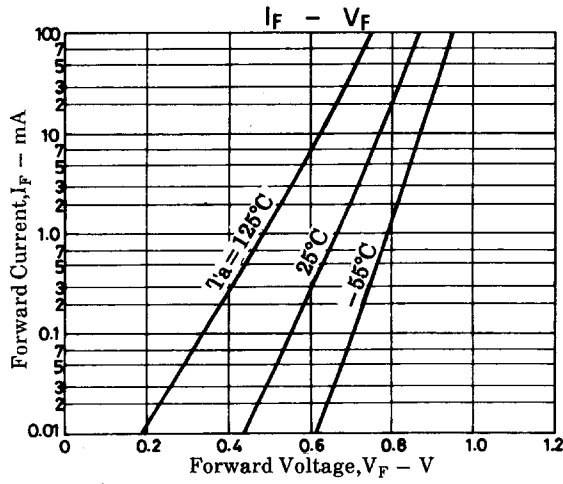
| Parameter                 | Symbol | Conditions                            | Ratings |      |     | Unit          |
|---------------------------|--------|---------------------------------------|---------|------|-----|---------------|
|                           |        |                                       | min     | typ  | max |               |
| Reverse Voltage           | $V_R$  | $I_R=10\mu\text{A}$                   | 50      |      |     | V             |
| Reverse Current           | $I_R$  | $V_R=45\text{V}$                      |         |      | 0.5 | $\mu\text{A}$ |
| Forward Voltage           | $V_F$  | $I_F=100\text{mA}$                    |         | 0.87 | 1.0 | V             |
| Interterminal Capacitance | C      | $V_R=40\text{V}$ , $f=1\text{MHz}$    |         | 0.6  | 1.0 | pF            |
| Series Resistance         | $r_s$  | $I_F=50\text{mA}$ , $f=470\text{MHz}$ |         | 0.5  | 0.7 | $\Omega$      |

· Marking: MV

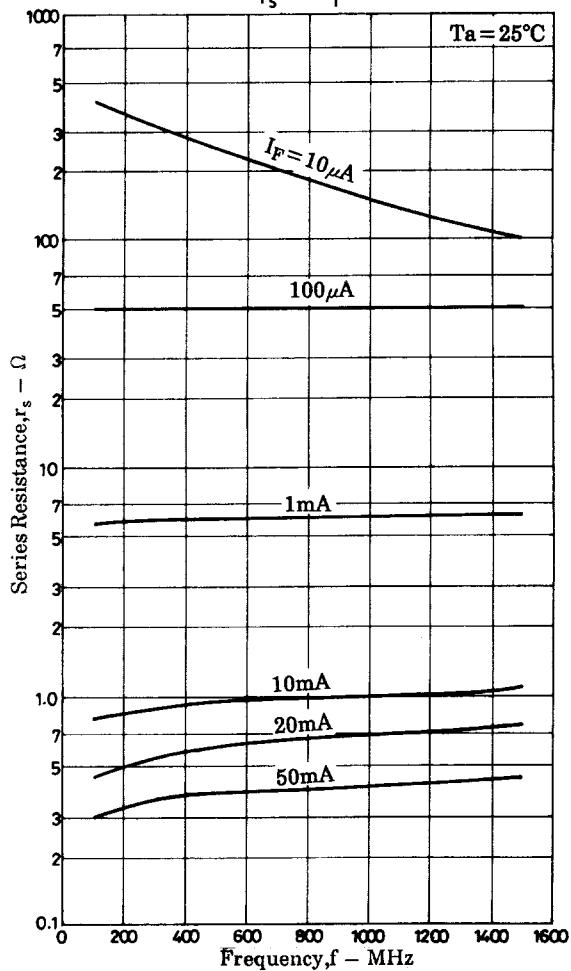
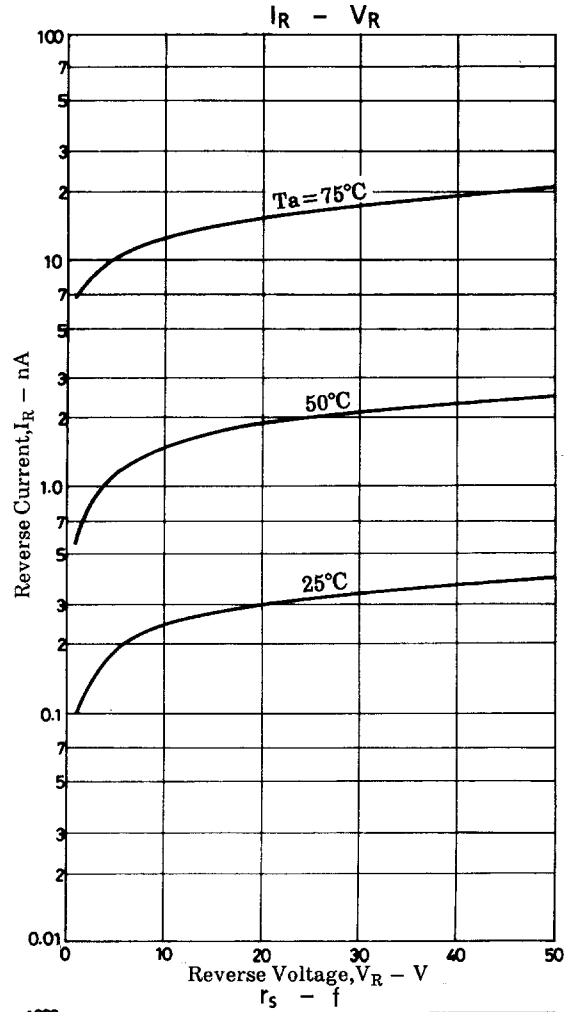
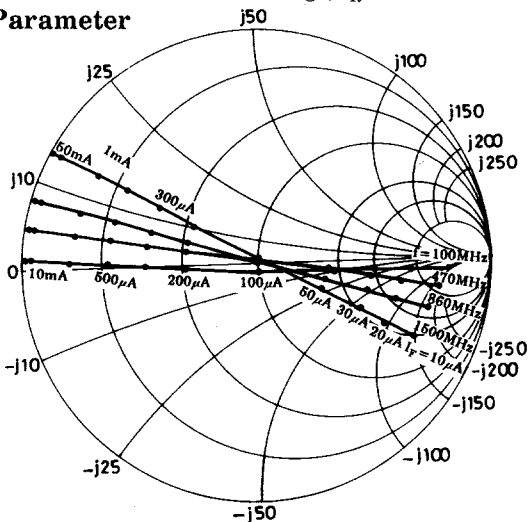
### Electrical Connection



# 1SV272



## S Parameter



- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
  - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
  - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of May, 1998. Specifications and information herein are subject to change without notice.