



SANYO Semiconductors

# DATA SHEET

An ON Semiconductor Company

## 1SV249 — Silicon Epitaxial Type PIN Diode for VHF, UHF, AGC Applications

### Features

- Very small-sized package facilitates high-density mounting and permits 1SV249-applied equipment to be made smaller
- Small interterminal capacitance ( $C=0.23\text{pF}$  typ)
- Small forward series resistance ( $r_s=4.5\Omega$  max)

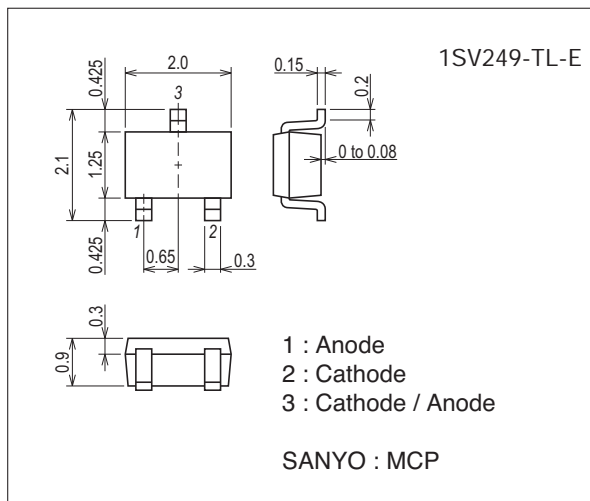
### Specifications

#### 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

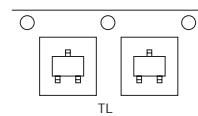
unit : mm (typ)  
7023A-007



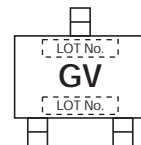
### Product & Package Information

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

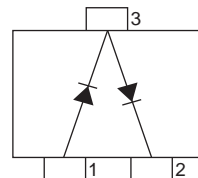
### Packing Type: TL



### Marking



### Electrical Connection



# 1SV249

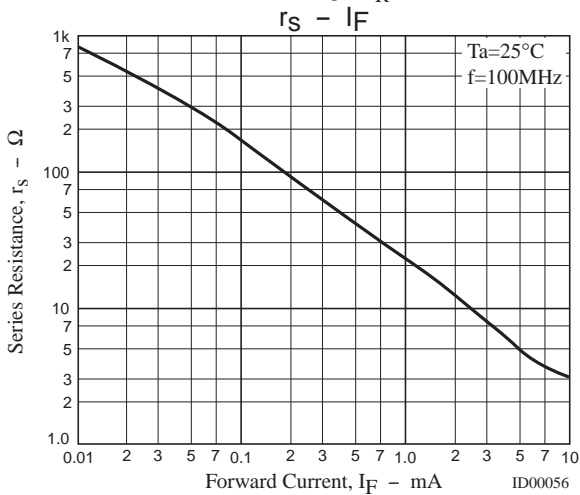
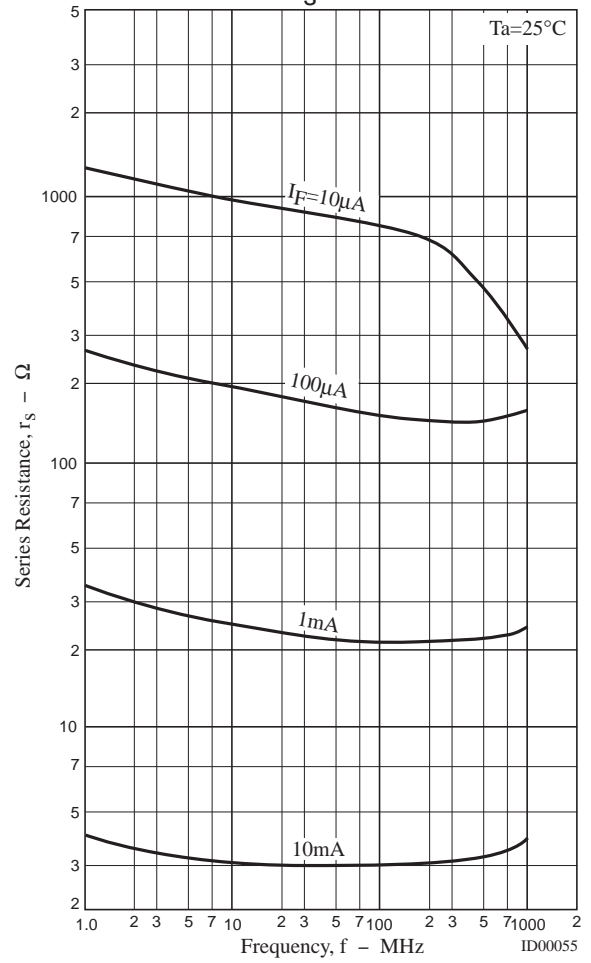
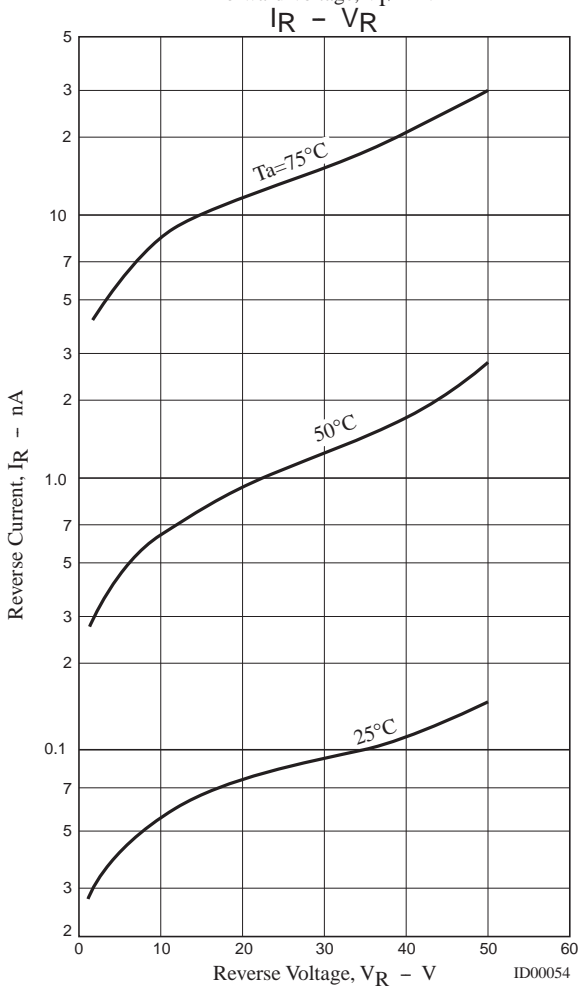
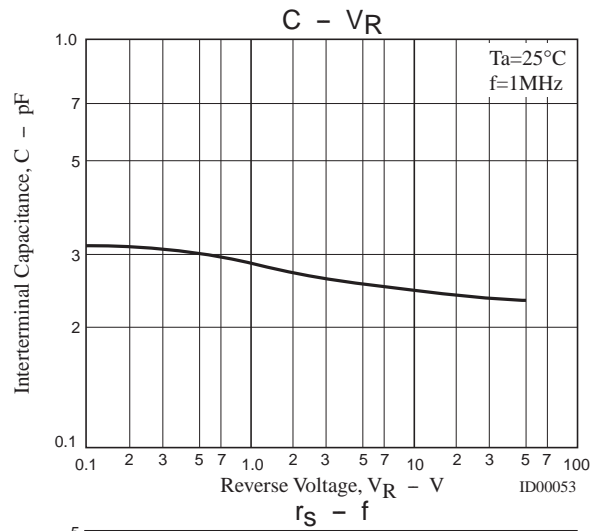
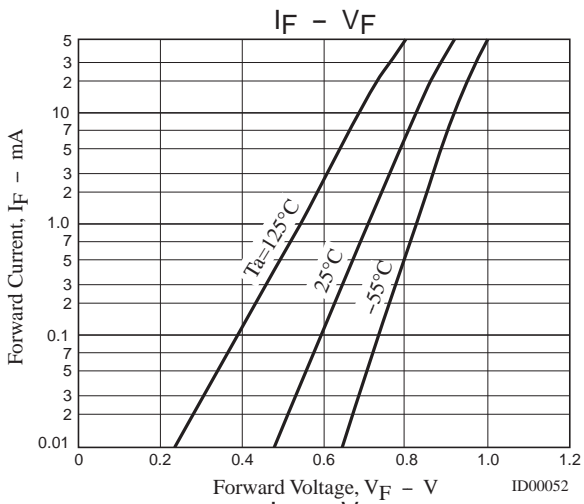
## Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V <sub>R</sub>	I <sub>R</sub> =10μA	50			V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =50V			0.1	μA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =50mA		0.92		V
Interterminal Capacitance	C	V <sub>R</sub> =50V, f=1MHz		0.23		pF
Series Resistance	r <sub>s</sub>	I <sub>F</sub> =10mA, f=100MHz			4.5	Ω

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

## Ordering Information

Device	Package	Shipping	memo
1SV249-TL-E	MCP	3,000pcs./reel	Pb Free



Embossed Taping Specification

1SV249-TL-E

1. Packing Format

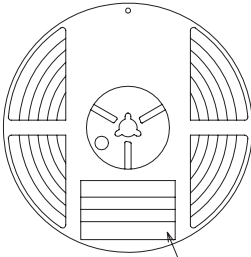
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
MCP	MCP	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Packing method

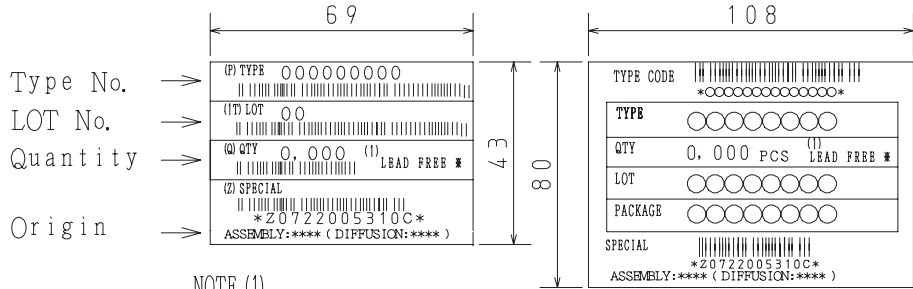
Reel label, Inner box label  
(unit: mm)

Outer box label

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



Reel label



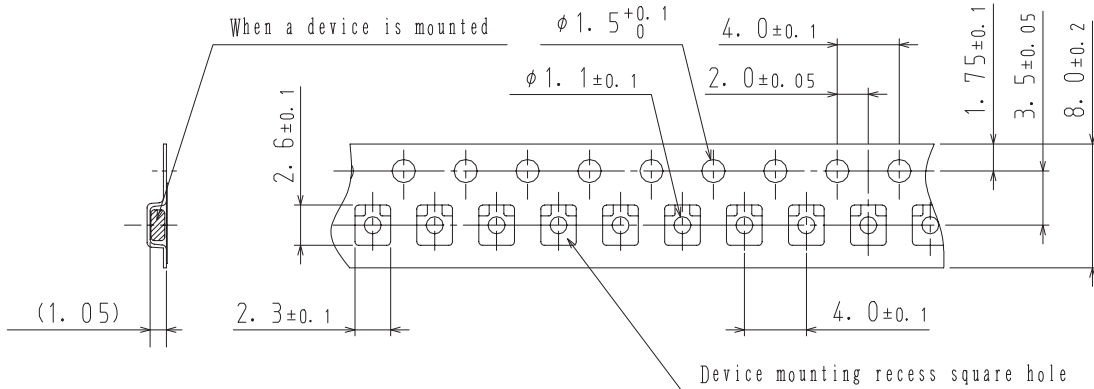
NOTE (1)

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

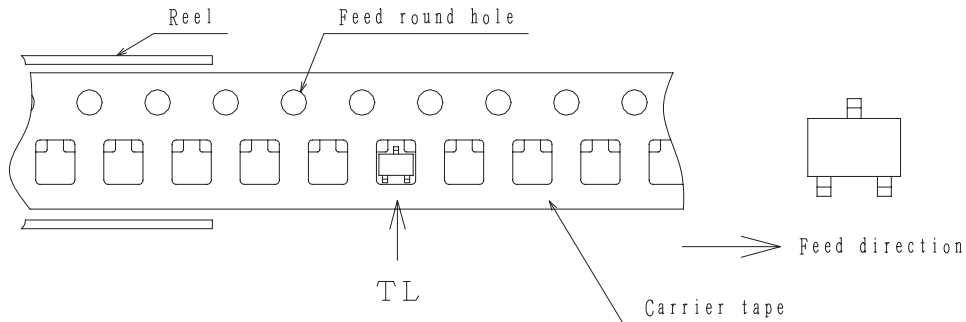
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

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

# 1SV249

## Outline Drawing

1SV249-TL-E



## Land Pattern Example



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