



# 1SV249

## PIN Diode

Dual series Pin Diode for VHF, UHF and AGC  
50V, 50mA,  $r_s = \max 4.5\Omega$ , MCP

ON Semiconductor®

<http://onsemi.com>

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

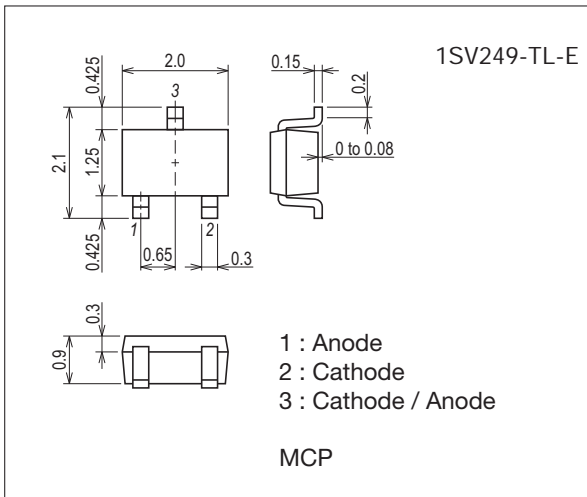
Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	$V_R$		50	V
Forward Current	$I_F$		50	mA
Allowable Power Dissipation	P		100	mW
Junction Temperature	$T_j$		125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ\text{C}$

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)

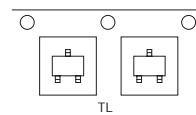
7023A-007



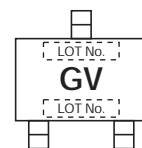
### Product & Package Information

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

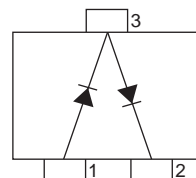
### Packing Type: TL



### Marking



### Electrical Connection



# 1SV249

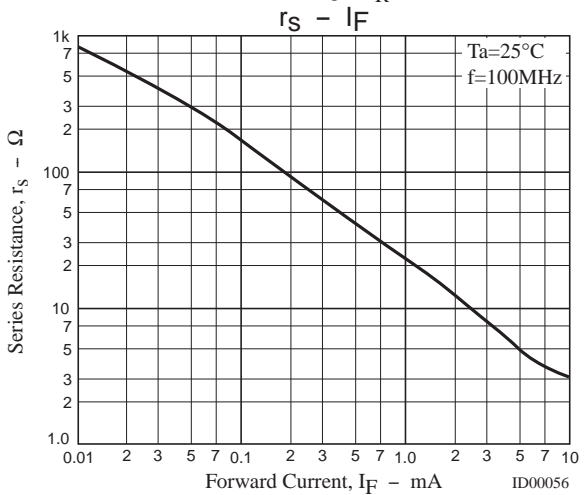
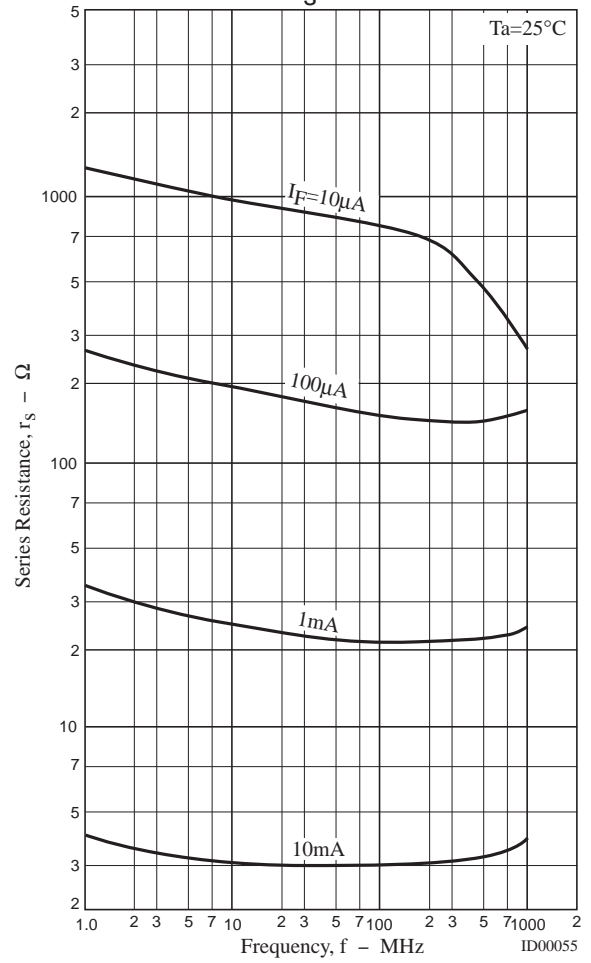
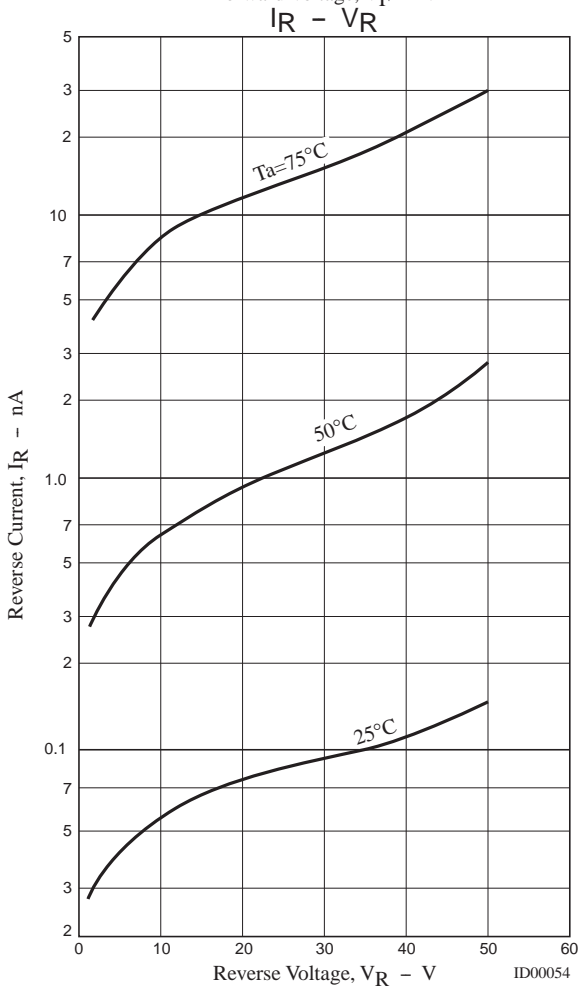
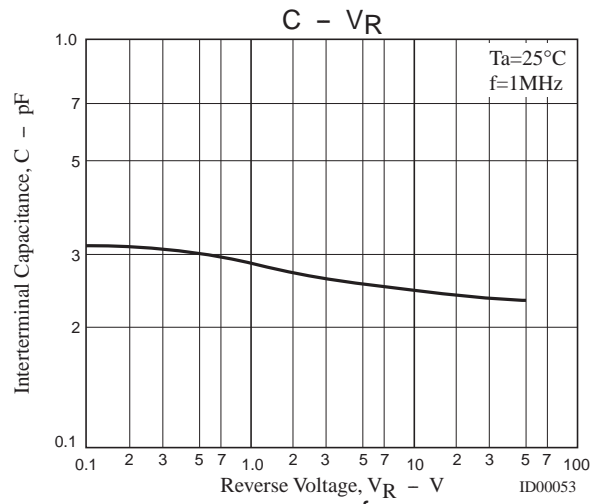
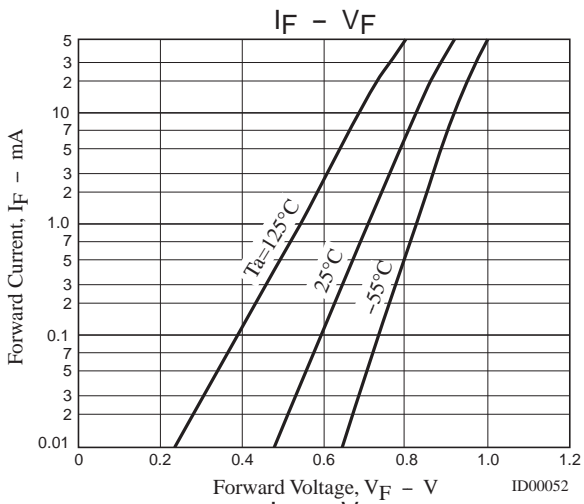
## Electrical Characteristics at Ta=25°C

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



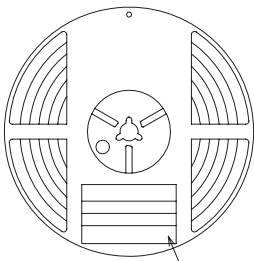
Embossed Taping Specification

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

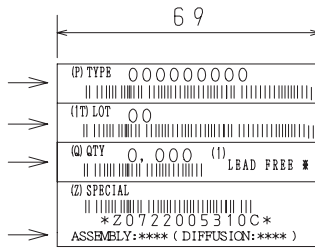
Packing method



Reel label

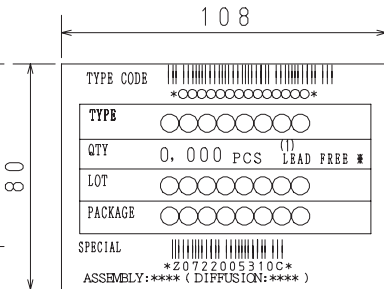
Type No.  
LOT No.  
Quantity  
Origin

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.



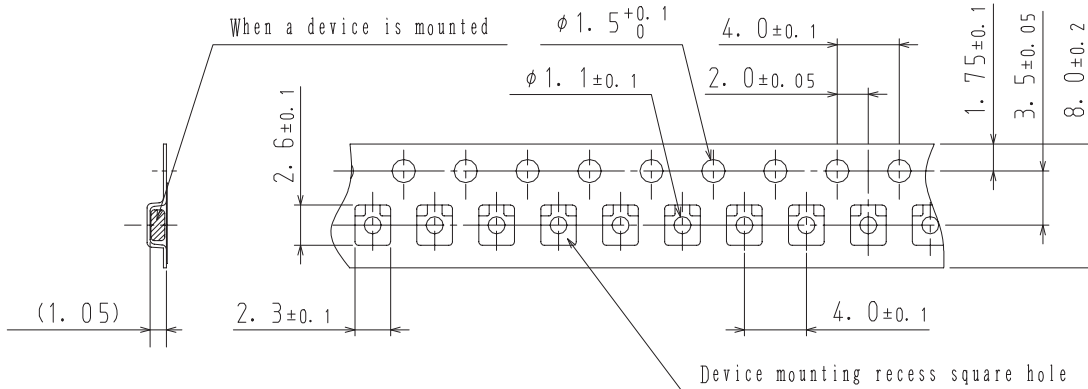
NOTE (1)

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

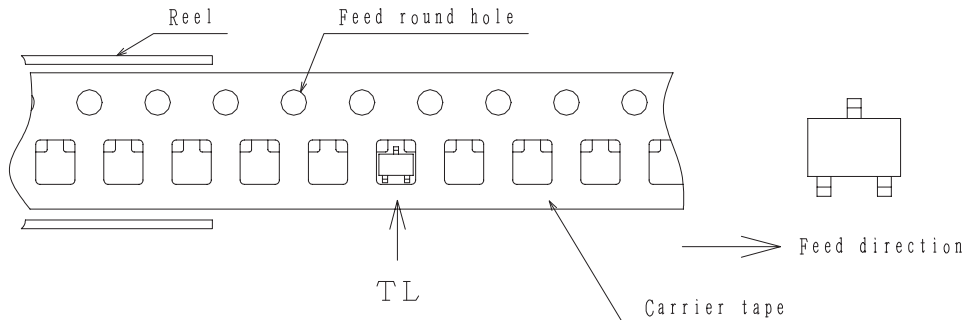
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

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

Outline Drawing

1SV249-TL-E



Land Pattern Example



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