



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)

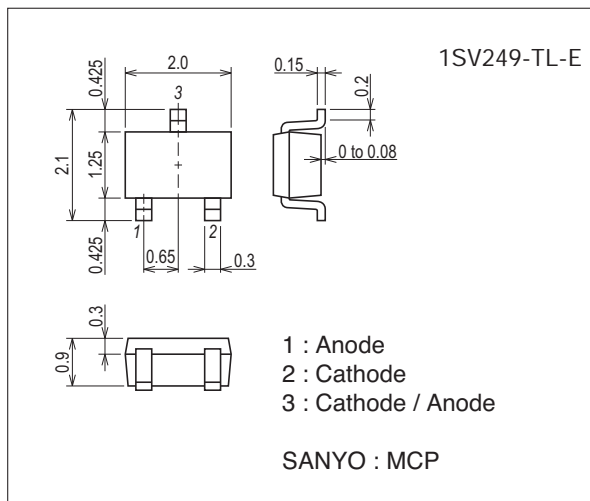
Specifications

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

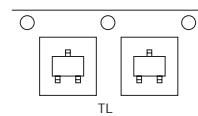
unit : mm (typ)
7023A-007



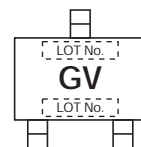
Product & Package Information

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

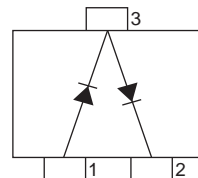
Packing Type: TL



Marking



Electrical Connection



1SV249

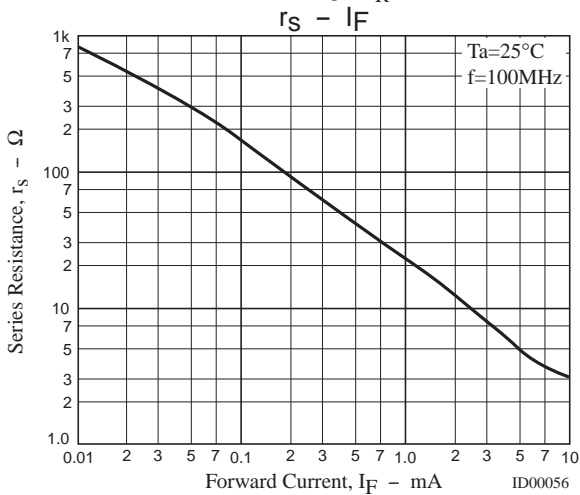
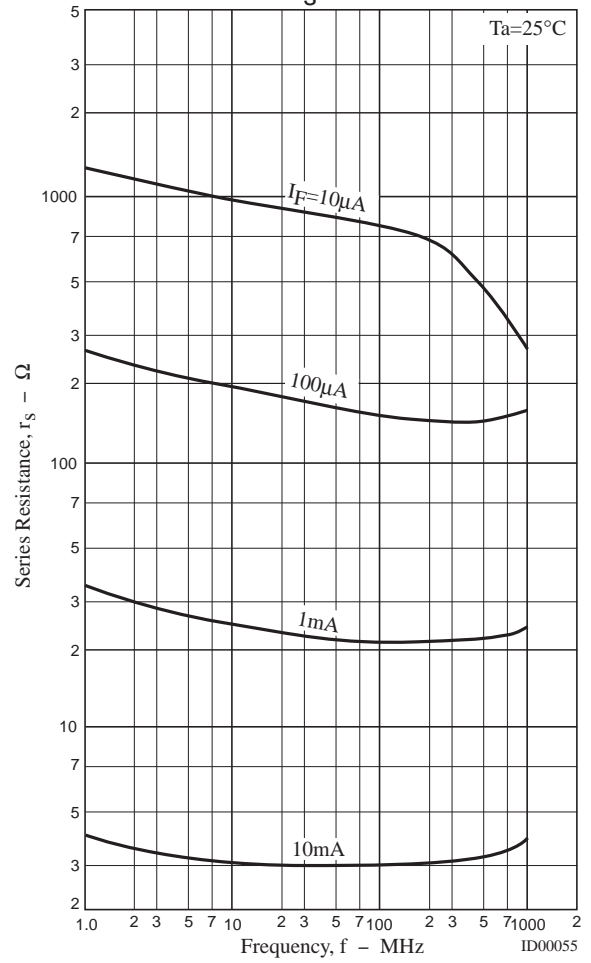
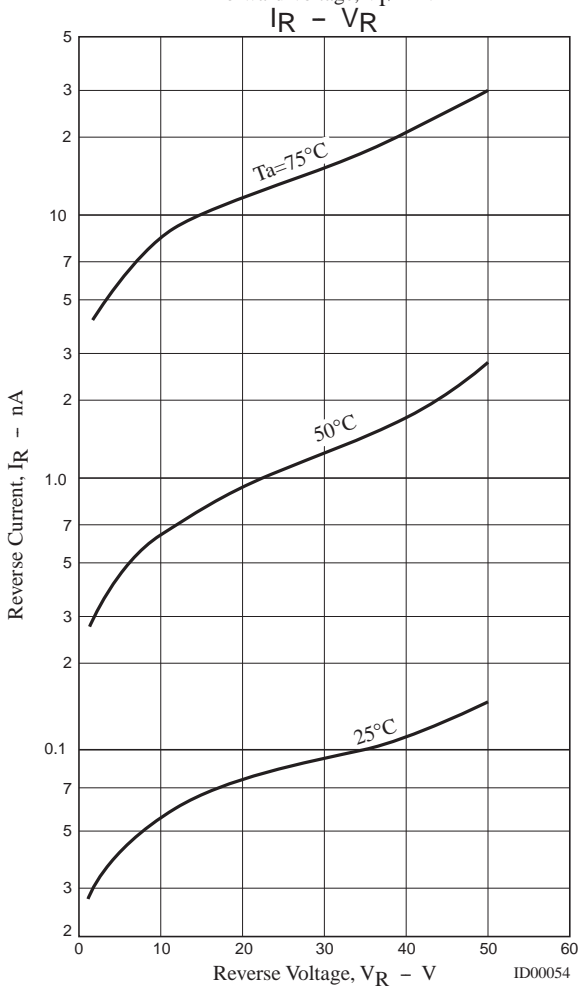
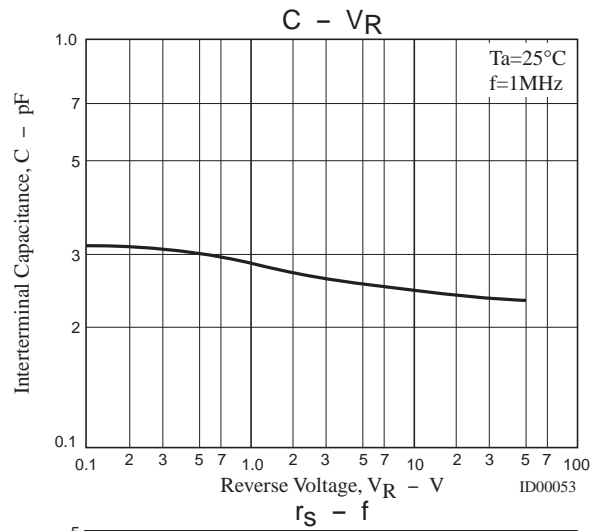
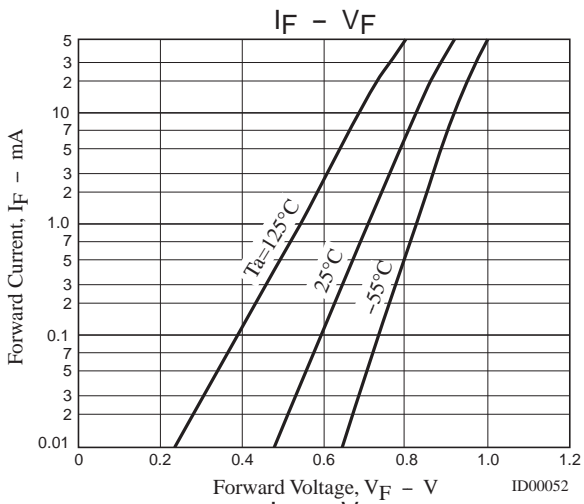
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V _R	I _R =10μA	50			V
Reverse Current	I _R	V _R =50V			0.1	μA
Forward Voltage	V _F	I _F =50mA		0.92		V
Interterminal Capacitance	C	V _R =50V, f=1MHz		0.23		pF
Series Resistance	r _s	I _F =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

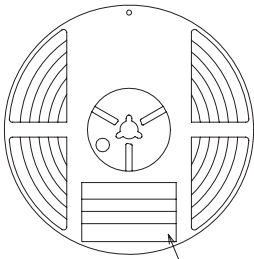
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
MCP	MCP	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Reel label, Inner box label
(unit: mm)

Outer box label

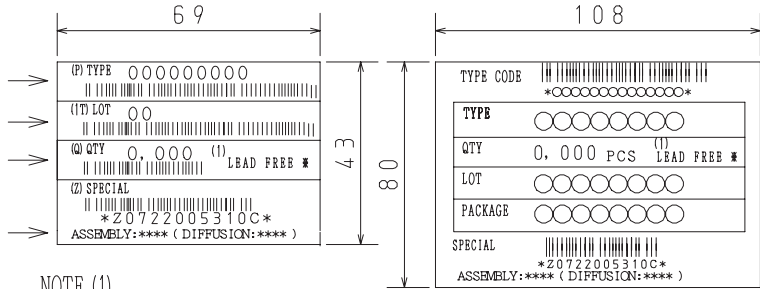
It is a label at the time of factory shipments.
The form of a label may change in physical distribution process.

Packing method



Reel label

Type No.
LOT No.
Quantity
Origin



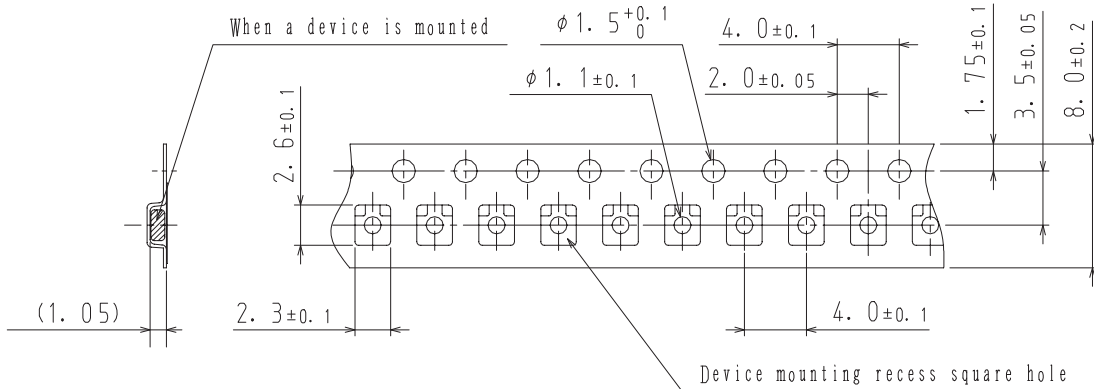
NOTE (1)

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

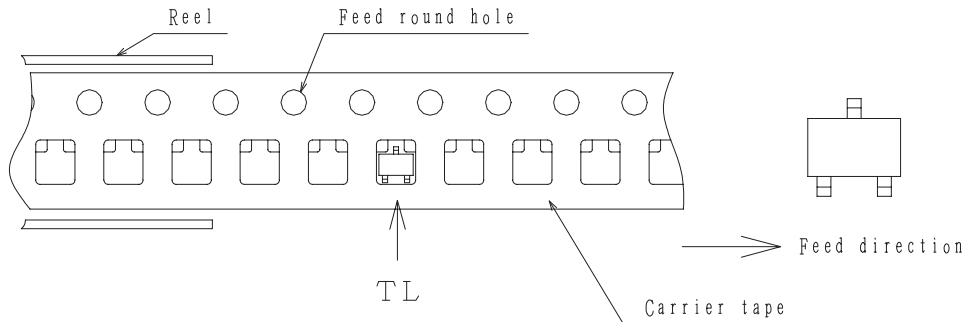
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

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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Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А