Ordering number : EN3906A

SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

1SV246 — Silicon Epitaxial Type
PIN Diode for VHF, UHF, AGC Applications

Features

- Series connection of 2 elements in a very small-sized package facilitates high-density mounting and permits 1SV246-applied equipment to be made smaller
- Small interterminal capacitance (C=0.23pF typ)
- Small forward series resistance (r_S=5Ω typ)

Specifications

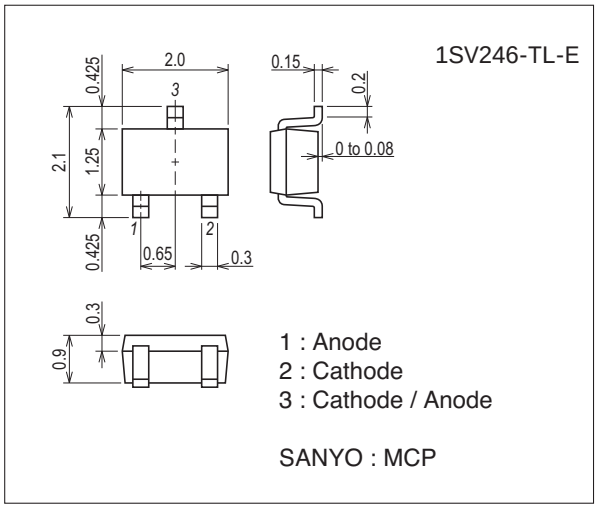
Absolute Maximum Ratings at Ta=25°C

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	Tj		125	°C
Storage Temperature	Tstg		−55 to +125	°C

Package Dimensions

unit : mm (typ)

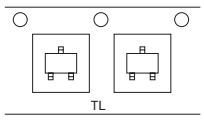
7023A-007



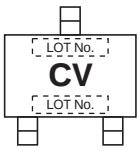
Product & Package Information

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

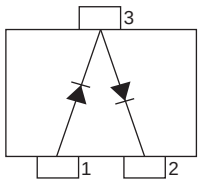
Packing Type: TL



Marking



Electrical Connection



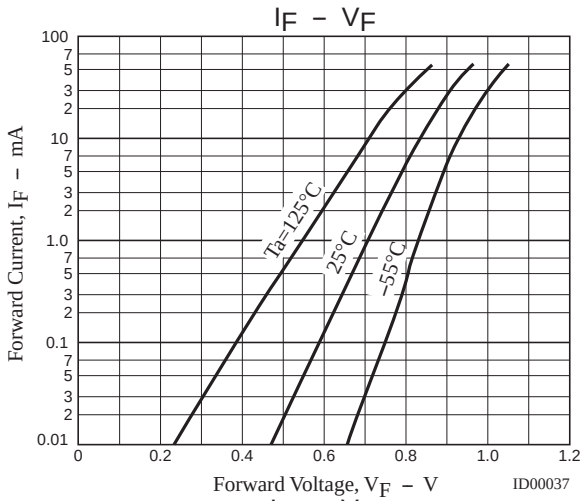
Electrical Characteristics at Ta=25°C

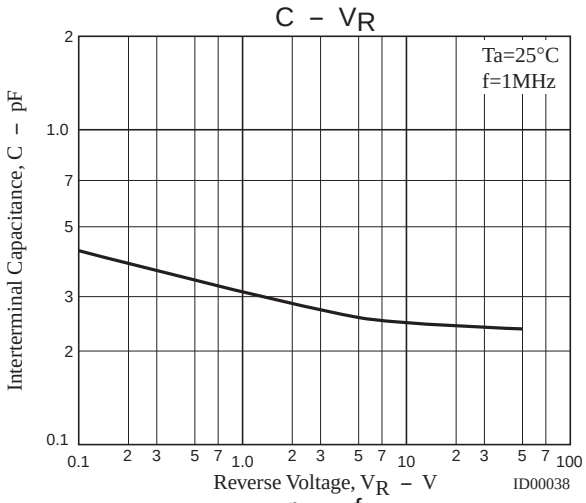
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	I_R=10μA	50			V
Reverse Current	I_R	V_R=50V			0.1	μA
Forward Voltage	V_F	I_F=50mA		0.95		V
Interterminal Capacitance	C	V_R=50V, f=1MHz		0.23		pF
Series Resistance	r_S	I_F=10mA, f=100MHz		5.0		Ω

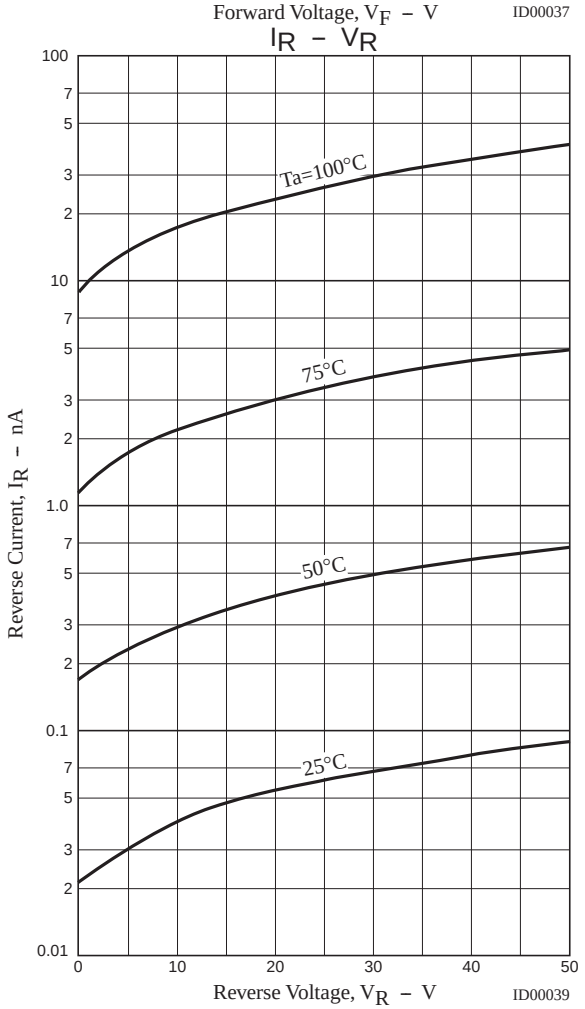
Note : The specifications shown above are for each individual diode.

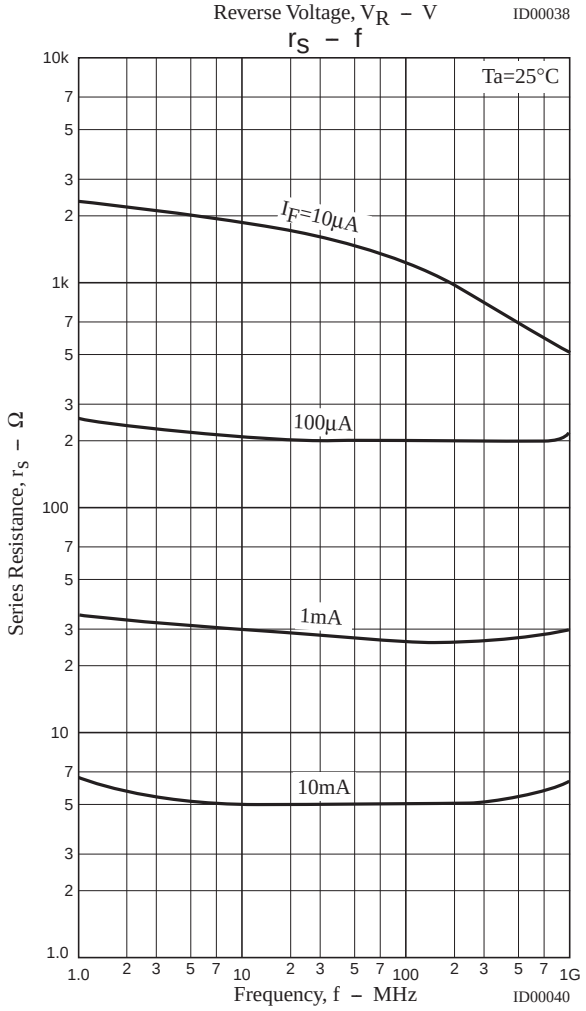
Ordering Information

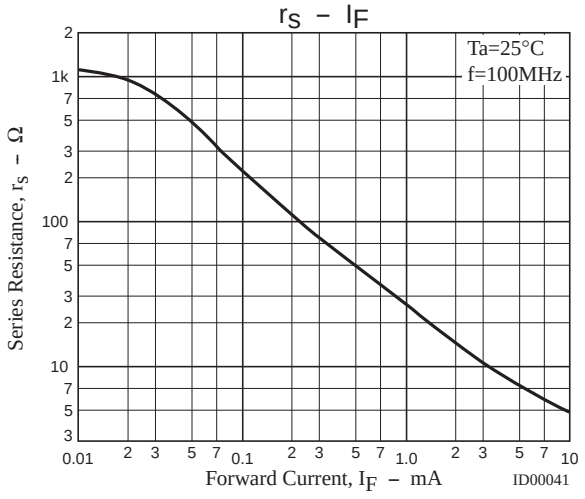
Device	Package	Shipping	memo
1SV246-TL-E	MCP	3,000pcs./reel	Pb Free


IF – VF
Forward Current, IF – mA
Forward Voltage, VF – V
Ta=125°C
25°C
–55°C
ID00037


C – VR
Interterminal Capacitance, C – pF
Reverse Voltage, VR – V
Ta=25°C
f=1MHz
ID00038


IR – VR
Reverse Current, IR – nA
Reverse Voltage, VR – V
Ta=100°C
75°C
50°C
25°C
ID00039


rS – f
Series Resistance, rS – Ω
Frequency, f – MHz
Ta=25°C
IF=10μA
100μA
1mA
10mA
ID00040


rS – IF
Series Resistance, rS – Ω
Forward Current, IF – mA
Ta=25°C
f=100MHz
ID00041

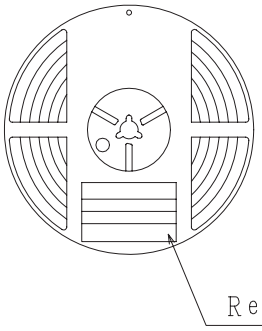
Embossed Taping Specification

1SV246-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

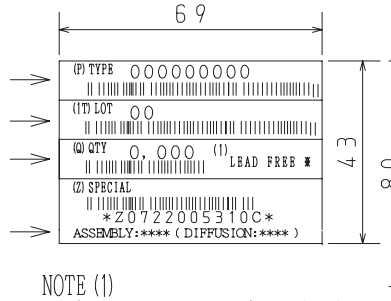
Packing method



Reel label

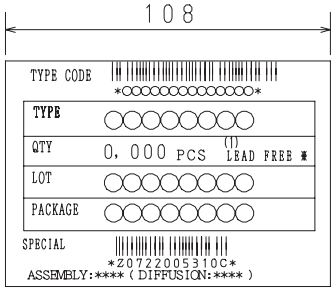
Reel label, Inner box label

(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.



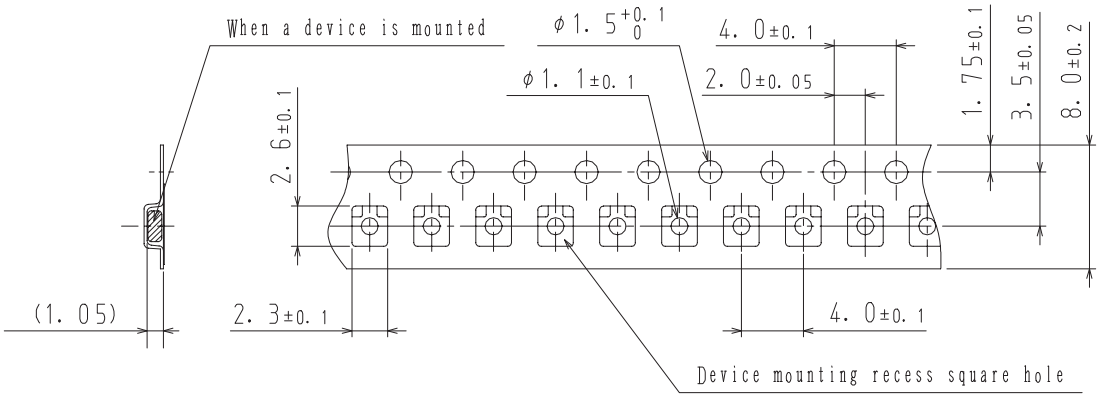
NOTE (1)

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

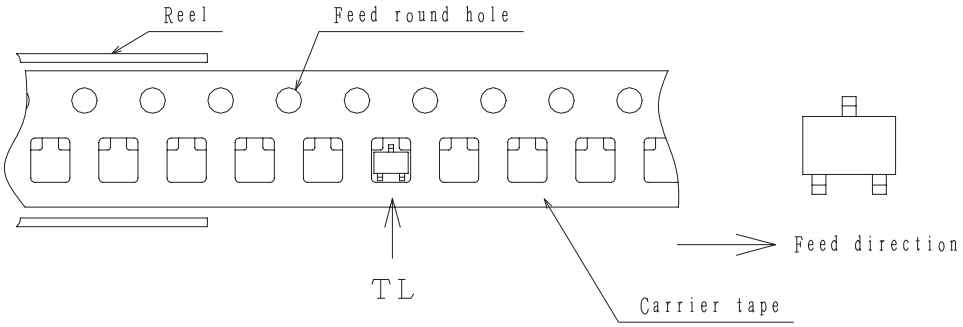
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

2-1. Carrier tape size (unit:mm)



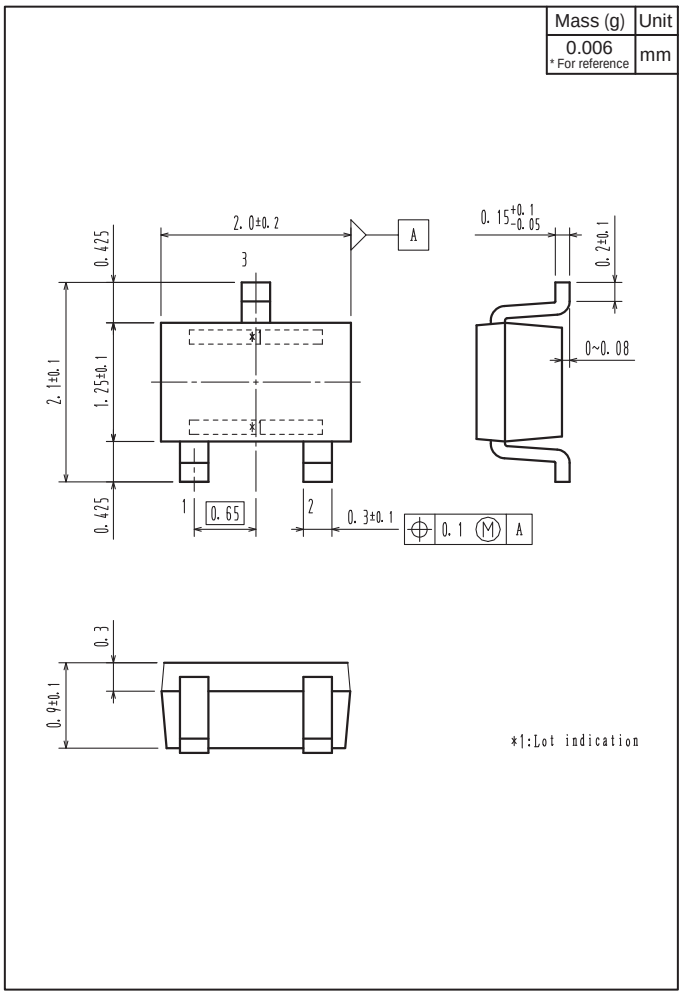
2-2. Device placement direction



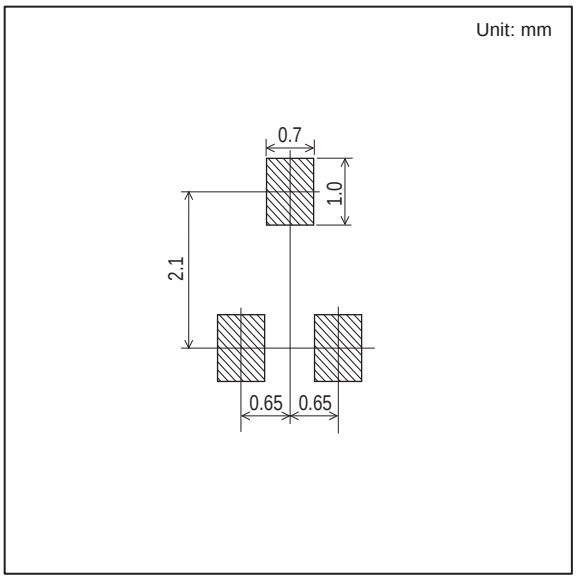
Those with oen electrode terminal on the feed hole side·····TL

Outline Drawing

1SV246-TL-E



Land Pattern Example



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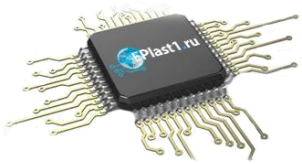
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- Подбор аналогов;
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- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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