



SANYO Semiconductors

## DATA SHEET

An ON Semiconductor Company

# RD0106T — Diffused Junction Silicon Diode

## Low VF • High-Speed Switching Diode

### Features

- High breakdown voltage ( $V_{RRM}=600V$ )
- Low forward voltage ( $V_F \text{ max}=1.3V$ )
- Halogen free compliance
- Fast reverse recovery time
- Low switching noise

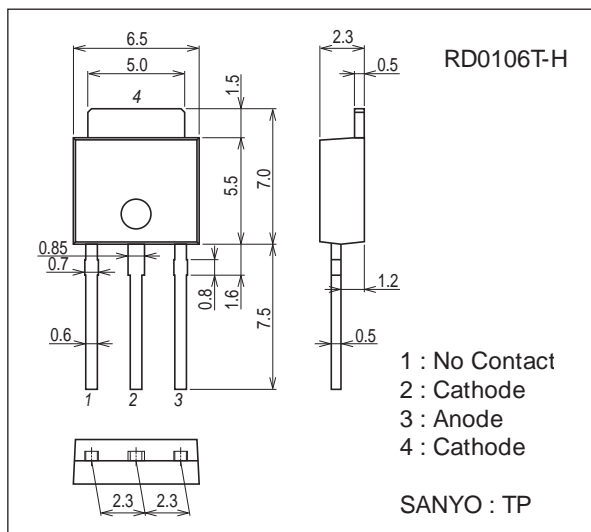
### Specifications

Absolute Maximum Ratings at  $T_a=25^\circ C$ 

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		600	V
Average Output Current	$I_O$		1	A
Surge Forward Current	$I_{FSM}$	Sine wave 10ms	10	A
Junction Temperature	$T_j$		150	$^\circ C$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ C$

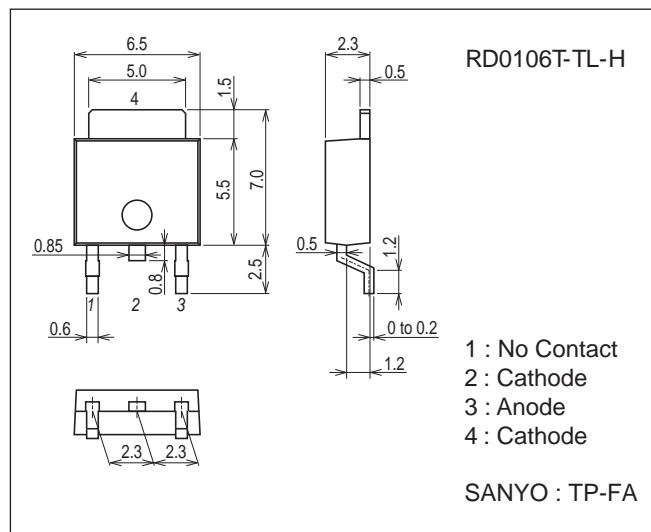
### Package Dimensions unit : mm (typ)

7518-002



### Package Dimensions unit : mm (typ)

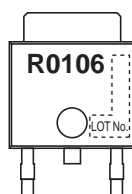
7003-001



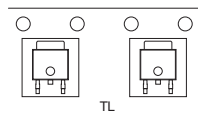
### Product & Package Information

- Package : TP
- JEITA, JEDEC : SC-64, TO-251
- Minimum Packing Quantity : 500 pcs./bag
- Package : TP-FA
- JEITA, JEDEC : SC-63, TO-252
- Minimum Packing Quantity : 700 pcs./reel

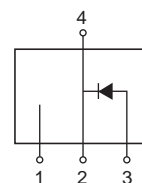
### Marking (TP, TP-FA)



### Packing Type (TP-FA) : TL



### Electrical Connection



SANYO Semiconductor Co., Ltd.

<http://www.sanyosemi.com/en/network/>

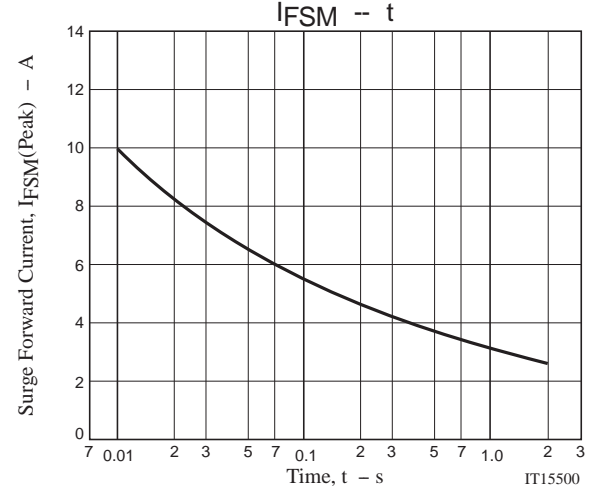
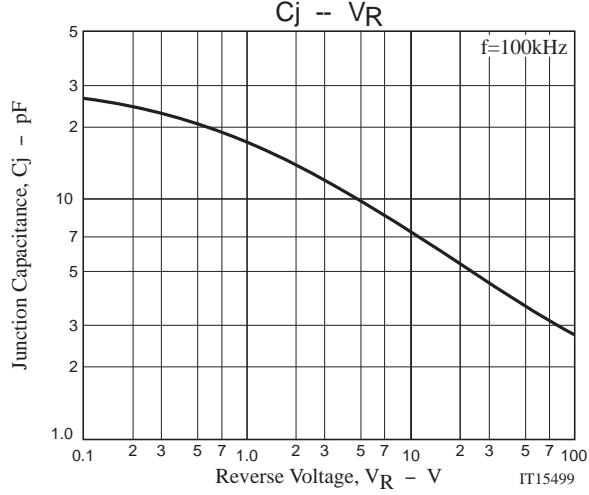
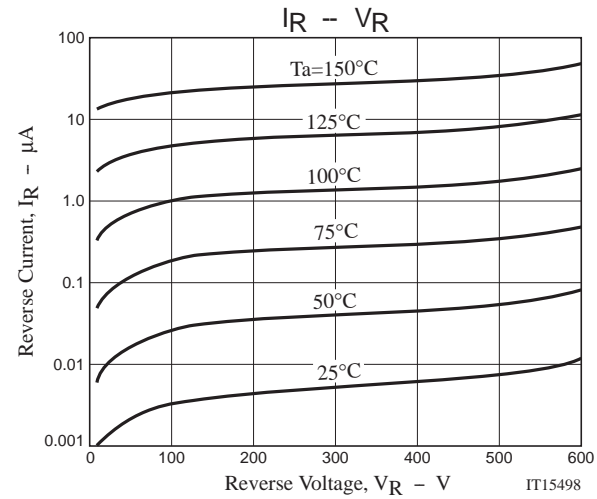
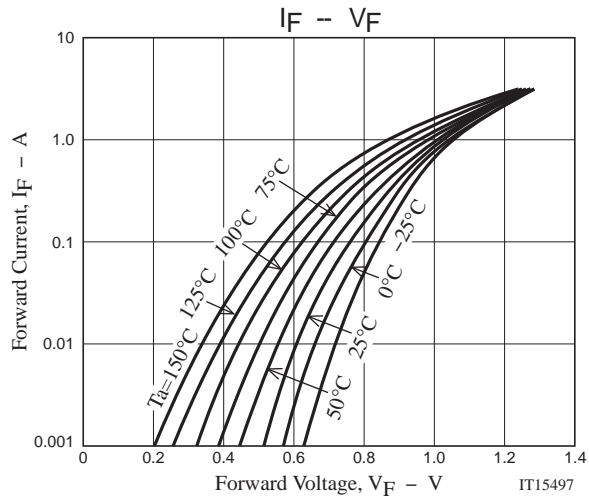
RD0106T

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=1\text{mA}$	600			V
Forward Voltage	$V_F$	$I_F=1\text{A}$		1.1	1.3	V
Reverse Current	$I_R$	$V_R=600\text{V}$			10	$\mu\text{A}$
Reverse Recovery Time	$t_{rr1}$	$I_F=1\text{A}, di/dt=100\text{A}/\mu\text{s}$		40	50	ns
	$t_{rr2}$	$I_F=0.5\text{A}, I_R=1\text{A}$		16		ns
Thermal Resistance	$R_{th(j-c)}$	Junction - Case		6		$^{\circ}\text{C}/\text{W}$

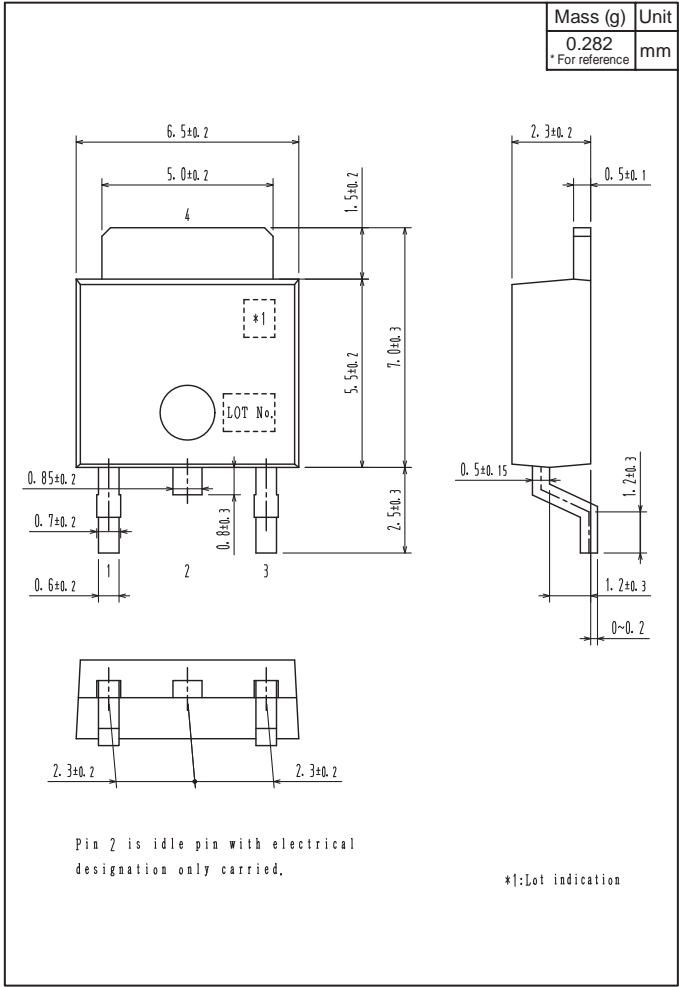
Ordering Information

Device	Package	Shipping	memo
RD0106T-H	TP	500pcs./bag	Pb Free and halogen Free
RD0106T-TL-H	TP-FA	700pcs./reel	

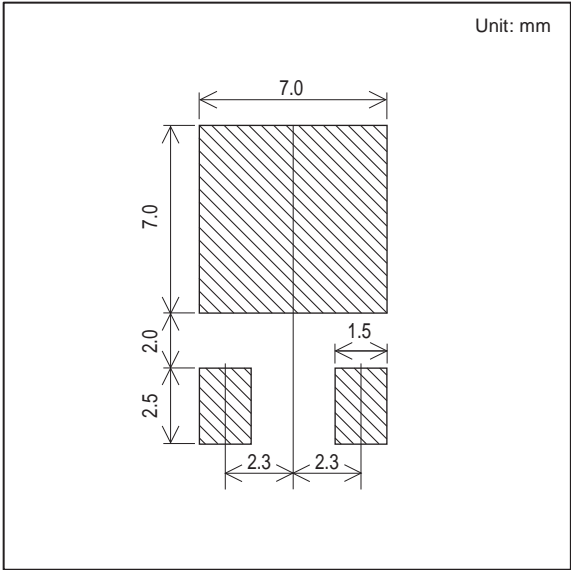




Outline Drawing  
RD0106T-TL-H



Land Pattern Example

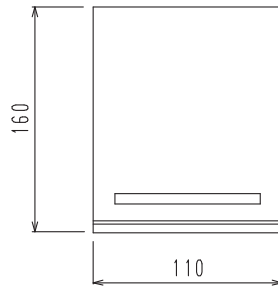
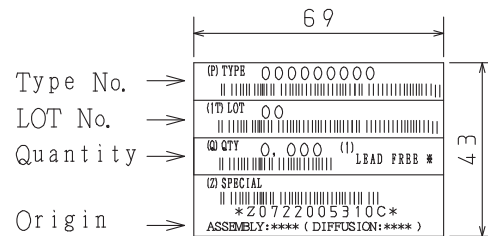


**Bag Packing Specification**

RD0106T-H

1. Packing Format

Package Name	Maximum Number of devices contained (pcs)			
	Bag	Inner box	Outer box	
TP	500	B-1	A-1	A-2
		10, 000	50, 000	30, 000
		Packing format (Dimensions:mm (external))		
		Inner box	Outer box	
		B-1	A-1	A-2
		445×225×55	470×250×300	470×250×190

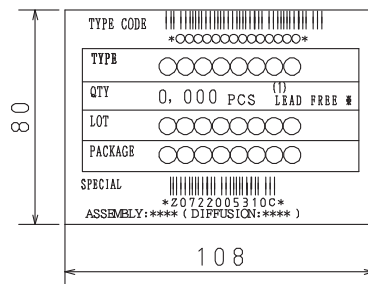
2. Bag dimensions  
(unit:mm)3. Bag label, Inner box label  
(unit:mm)4. Outer box label  
(unit:mm)

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

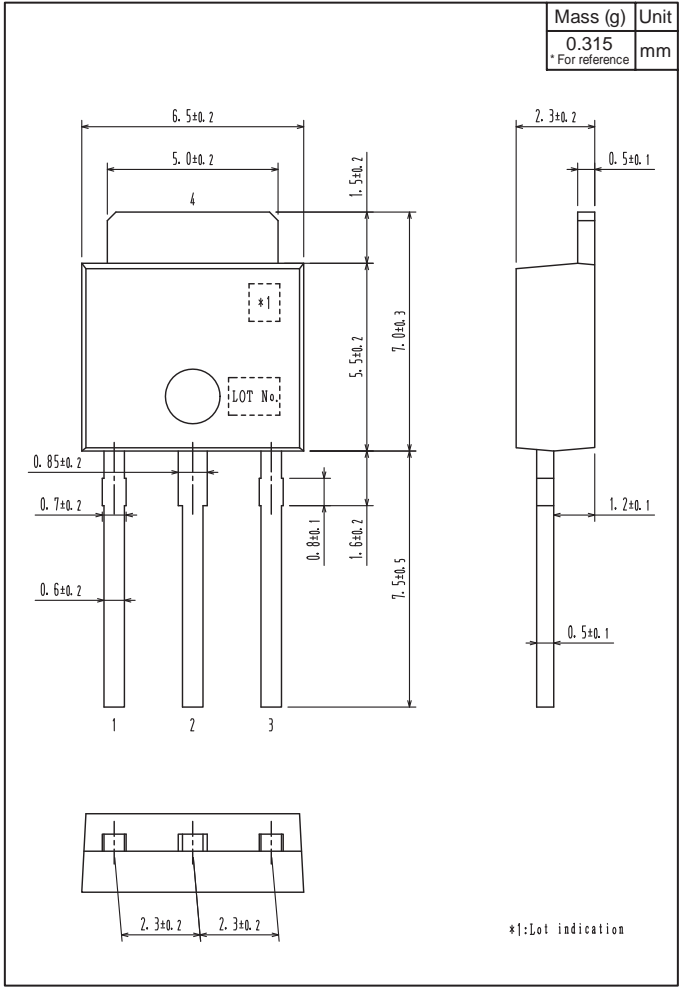
## NOTE (1)

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



Outline Drawing  
RD0106T-H



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