

# SANYO Semiconductors DATA SHEET

# **DWA010**-

Silicon Epitaxial Planar Type

# **Ultrahigh-Speed Switching Diode**

#### **Features**

- · Ideally suited for use in hybrid ICs because of ultrasmall package.
- · High switching speed.
- · Small interterminal capacitance.

# **Specifications**

## Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Peak Reverse Voltage	VRM		85	V
Reverse Voltage	VR		80	V
Peak Forward Current	IFM	Unit Rating	300	mA
	IFM*	Total Rating	450	mA
Average Rectified Current	IO	Unit Rating	100	mA
	lo*	Total Rating	150	mA
Surge Forward Current	IFSM	1μs, Unit Rating	4	Α
	IFSM*	1μs, Total Rating	6	Α
Allowable Power Dissipation	Р		200	mW
Junction Temperature	Tj		125	°C
Storage Temperature	Tstg		-55 to +125	°C

<sup>\* :</sup> Total value

### Electrical Characteristics at Ta=25°C

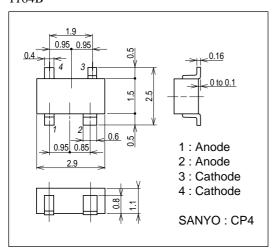
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
	V <sub>F</sub> 1	IF=1mA		0.61		<b>V</b>
Forward Voltage	V <sub>F</sub> 2	I <sub>F</sub> =10mA		0.74		٧
	V <sub>F</sub> 3	I <sub>F</sub> =100mA			1.2	٧
Reverse Current	I <sub>R</sub> 1	V <sub>R</sub> =30V			0.1	μΑ
	I <sub>R</sub> 2	V <sub>R</sub> =80V			0.5	μΑ
Interterminal Capacitance	С	V <sub>R</sub> =0, f=1MHz			2.0	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =10mA, V <sub>R</sub> =6V, R <sub>L</sub> =50Ω, I <sub>rr</sub> =0.1Irp			4.0	ns

Marking: W8

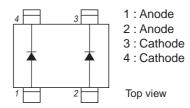
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### **Package Dimensions**

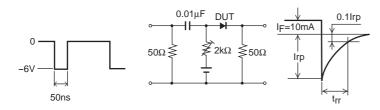
unit : mm 1164B

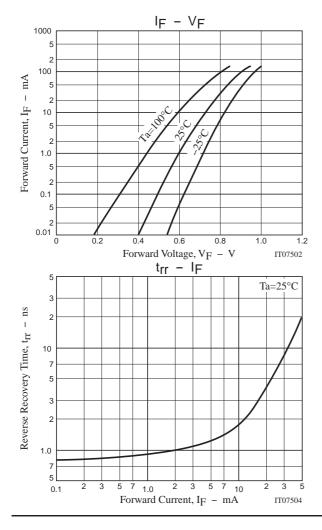


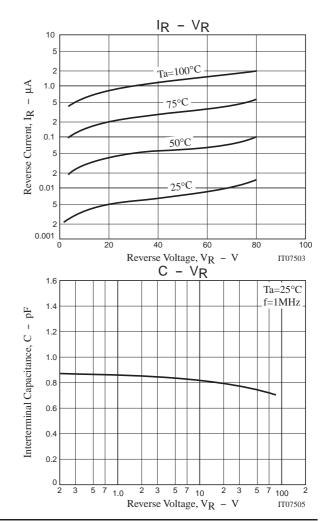
## **Electrical Connection**



### **Reverse Recovery Time Test Circuit**







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