

### SANYO Semiconductors DATA SHEET

# DWC010 — Silicon Epitaxial Planar Type

# **Ultrahigh-Speed Switching Diode**

#### **Features**

- · Ideally suited for use in hybrid ICs because of ultrasmall package.
- High breakdown voltage: VR=200V.
- Small interterminal capacitance.

### **Specifications**

#### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Peak Reverse Voltage	VRM		250	V
Reverse Voltage	VR		200	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

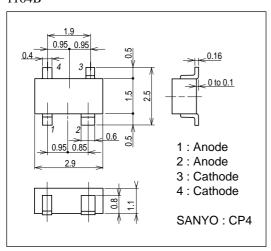
Parameter	Symbol	Conditions	Ratings			1.1
			min	typ	max	Unit
Forward Voltage	V <sub>F</sub> 1	I <sub>F</sub> =10mA		0.72		V
	V <sub>F</sub> 2	I <sub>F</sub> =100mA			1.2	V
Reverse Current	I <sub>R</sub> 1	V <sub>R</sub> =50V			0.1	μΑ
	I <sub>R</sub> 2	V <sub>R</sub> =200V			1.0	μΑ
Interterminal Capacitance	С	V <sub>R</sub> =0, f=1MHz			3.0	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =10mA, V <sub>R</sub> =6V, R <sub>L</sub> =50 $\Omega$ , I <sub>rr</sub> =0.1Irp			60	ns

Marking: A3

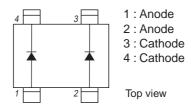
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#### **Package Dimensions**

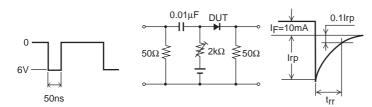
unit : mm 1164B

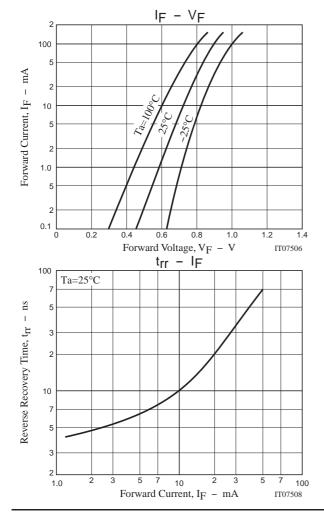


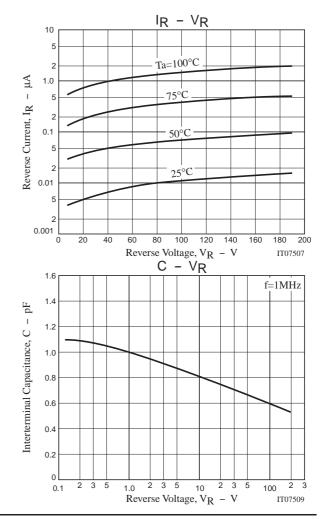
#### **Electrical Connection**



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







#### **DWC010**

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