

**DCC010** 

**Silicon Epitaxial Planar Type (Series Connection)** 

# **Ultrahigh-Speed Switching Diode**

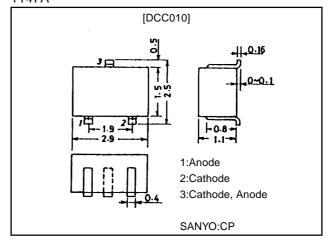
## **Features**

- · Ideally suited for use in hybrid ICs because of very small package.
- · Fast switching speed.
- · Small interterminal capacitance.

# **Package Dimensions**

unit:mm

1147A



# **Specifications**

# Absolute Maximum Ratings at Ta = 25°C

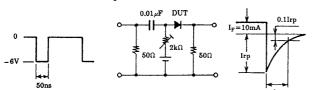
Parameter	Symbol	Conditions	Ratings	Unit
Peak Reverse Voltage	V <sub>RM</sub>		85	V
Reverse Voltage	V <sub>R</sub>		80	V
Peak Forward Current	I <sub>FM</sub>	Unit Rating	300	mA
			210	mA
Average Rectified Current	IO	Unit Rating	100	mA
			70	mA
Surge Current (1µs)	I <sub>FSM</sub>	Unit Rating	4	А
			2.8	Α
Power Dissipation	Р		200	mW
Junction Temperature	Tj		125	°C
Storage Temperature	Tstg		-55 to +125	°C

#### Electrical Characteristics at Ta = 25°C

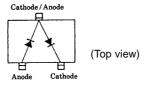
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Oilit
Forward Voltage	V <sub>F</sub> (1)	I <sub>F</sub> =1mA		0.60		V
	V <sub>F</sub> (2)	I <sub>F</sub> =10mA		0.72		V
	V <sub>F</sub> (3)	I <sub>F</sub> =100mA			1.20	V
Reverse Current	I <sub>R</sub> (1)	V <sub>R</sub> =30V			0.1	μA
	I <sub>R</sub> (2)	V <sub>R</sub> =80V			0.5	μΑ
Interterminal Capacitance	С	V <sub>R</sub> =0V, f=1MHz			3.0	pF
Reverse Recovery Time	trr	$I_F=10mA$ , $V_R=6V$ , $R_L=50\Omega$ , $I_{rr}=0.1I_{rp}$			4.0	ns

· Marking:W7

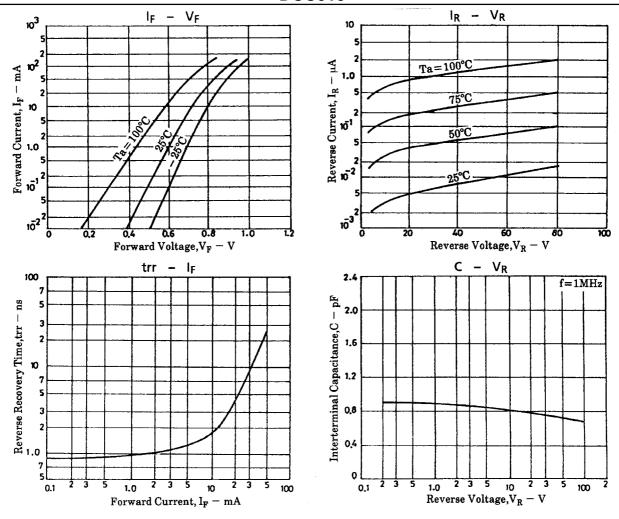
## **Reverse Recovery Time Test Circuit**



### **Electrical Connection**



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