

## **DCF010**

Silicon Epitaxial Planar Type (Anode Common)

# **Ultrahigh-Speed Switching Diode**

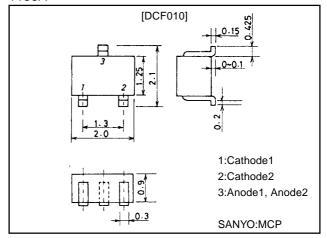
#### **Features**

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

## **Package Dimensions**

unit:mm

1186A



## **Specifications**

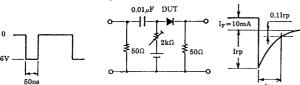
#### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Conditions Ratings	
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
		Total rating	450	mA
Average Rectified Current	lo	Unit rationg	100	mA
		Total tating	150	mA
Surge Current (1µs)	I <sub>FSM</sub>	Unit rating	4	Α
		total rating	6	Α
Allowable Power Dissipation	Р		100	mW
Junction Temperature	Tj		125	°C
Storage Temperature	Tstg		-55 to +125	°C

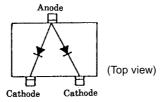
#### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
	Symbol		min	typ	max	Oill
Forward Voltage	V <sub>F1</sub>	I <sub>F</sub> =1mA		0.61		V
	V <sub>F2</sub>	I <sub>F</sub> =10mA		0.74		V
	V <sub>F3</sub>	I <sub>F</sub> =100mA			1.20	V
Reverse Current	I <sub>R1</sub>	V <sub>R</sub> =30V			0.1	μA
	I <sub>R2</sub>	V <sub>R</sub> =80V			0.5	μA
Interterminal Capacitance	С	V <sub>R</sub> =0V, f=1MHz			4.0	pF
Reverse Recovery Time	trr	I <sub>F</sub> =10mA, V <sub>R</sub> =6V, R <sub>L</sub> =50Ω, Irr=0.1Irp			4.0	ns

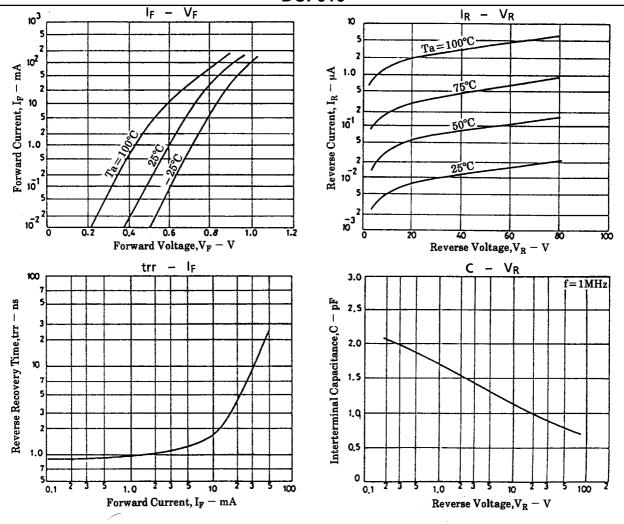
#### **Reverse Recovery Time Test Circuit**



#### **Electrical Connection**



### **DCF010**



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