Ordering number: EN2789B



**DCF010** 

Silicon Epitaxial Planar Type (Anode Common)

# **Ultrahigh-Speed Switching Diode**

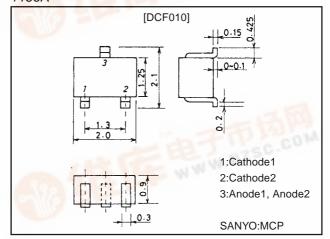
#### **Features**

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

## **Package Dimensions**

unit:mm

1186A



## **Specifications**

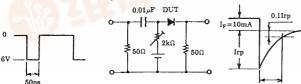
### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	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	Io	Unit rationg	100	mA
		Total tating	150	mA
Surge Current (1µs)	IFSM	Unit rating	4	Α
	- 57	total rating	6	Α
Allowable Power Dissipation	P	-034	100	mW
Junction Temperature	_ Jig C	P. C.	125	°C
Storage Temperature	Tstg		-55 to +125	°C

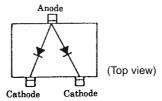
#### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions		Ratings		
			min	typ	max	Unit
Forward Voltage	V <sub>F1</sub>	I <sub>F</sub> =1mA		0.61	40-1	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	μΑ
	I <sub>R2</sub>	V <sub>R</sub> =80V			0.5	μΑ
Interterminal Capacitance	С	V <sub>R</sub> =0V, f=1MHz			4.0	pF
Reverse Recovery Time	trr	$I_F$ =10mA, $V_R$ =6V, $R_L$ =50Ω, $I_r$ =0.1 $I_r$ p			4.0	ns

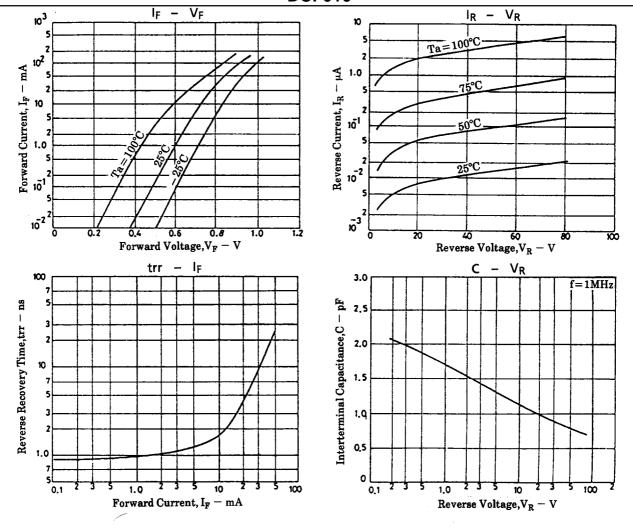
### Reverse Recovery Time Test Circuit



#### **Electrical Connection**



#### **DCF010**



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