

**DCG010** 

Silicon Epitaxial Planar Type (Cathode Common)

# **Ultrahigh-Speed Switching Diode**

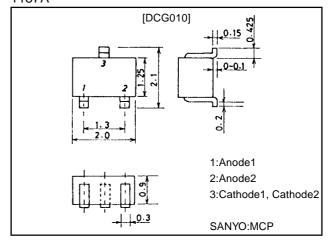
## **Features**

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

# **Package Dimensions**

unit:mm

1187A



# **Specifications**

## Absolute Maximum Ratings at Ta = 25°C

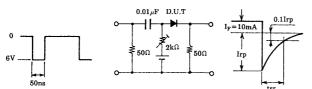
Parameter	Symbol	Conditions	Ratings	Unit
Peak Reverse Voltage	V <sub>RM</sub>		85	V
Reverse Voltage	V <sub>R</sub>		80	V
Peak Forward Current	I <sub>FM</sub>	Unit rating	300	mA
		Total rating	450	mA
Average Rectified Current	lo	Unit rating	100	mA
		Total rating	150	mA
Surge Current(1µs)	I <sub>FSM</sub>	Unit rating	4	А
		total rating	6	Α
Allowable Power Dissipation	Р		100	mW
Junction Temperature	Tj		125	°C
Storage Temperature	Tstg		-55 to +150	°C

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

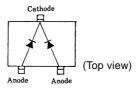
Parameter	Symbol	Conditions	Ratings			Unit
Falametei	Symbol		min	typ	max	Offic
Forward Voltage	V <sub>F1</sub>	I <sub>F</sub> =1mA		0.60		V
	V <sub>F2</sub>	I <sub>F</sub> =10mA		0.72		V
	V <sub>F3</sub>	I <sub>F</sub> =100mA			1.20	V
Reverse Current	I <sub>R1</sub>	V <sub>R</sub> =30V			0.1	μA
	I <sub>R2</sub>	V <sub>R</sub> =80V			0.5	μΑ
Interterminal Capacitance	С	V <sub>R</sub> =0V, f=1MHz			3.0	pF
Reverse Recovery Time	trr	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:W6

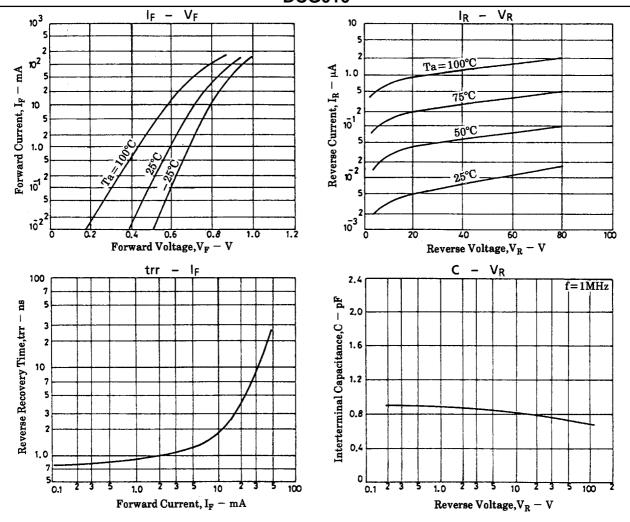
## **Reverse Recovery Time Test Circuit**



## **Electrical Connection**



# **DCG010**



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