

**DCG010** 

Silicon Epitaxial Planar Type (Cathode Common)

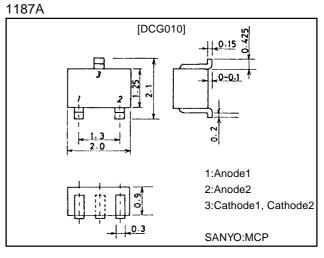
# **Ultrahigh-Speed Switching Diode**

### Features

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

### **Package Dimensions**

unit:mm



## **Specifications**

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

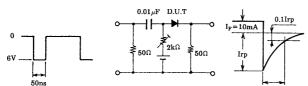
Parameter	Symbol	Conditions	Ratings	Unit
Peak Reverse Voltage	V <sub>RM</sub>		85	V
Reverse Voltage	V <sub>R</sub>		80	V
Peak Forward Current	IFM	Unit rating	300	mA
		Total rating	450	mA
Average Rectified Current	IO	Unit rating	100	mA
		Total rating	150	mA
Surge Current(1µs)	IFSM	Unit rating	4	Α
		total 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

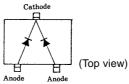
Parameter	Symbol	Conditions	Ratings			Unit
i alametei			min	typ	max	
Forward Voltage	V <sub>F1</sub>	I <sub>F</sub> =1mA		0.60		V
	V <sub>F2</sub>	I <sub>F</sub> =10mA		0.72		V
	V <sub>F3</sub>	I <sub>F</sub> =100mA			1.20	V
Reverse Current	I <sub>R1</sub>	V <sub>R</sub> =30V			0.1	μΑ
	I <sub>R2</sub>	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	$I_F=10mA$ , $V_R=6V$ , $R_L=50\Omega$ , $I_{rr}=0.1Irp$			4.0	ns

Marking:W6

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

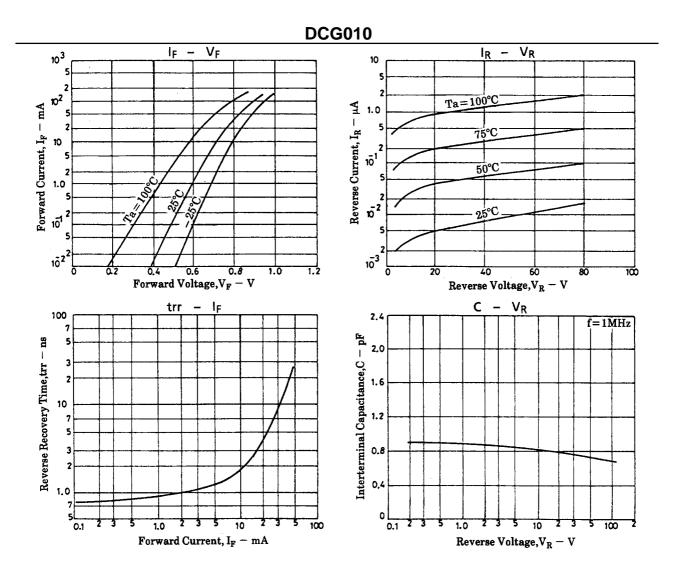


**Electrical Connection** 



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