



**THE DATASHEET OF  
DCG010-TL-E**



**DCG010**

Silicon Epitaxial Planar Type (Cathode Common)

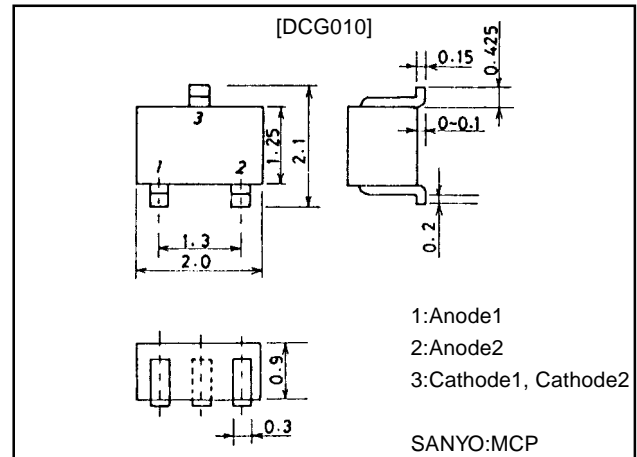
**Ultrahigh-Speed Switching Diode****Features**

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

**Package Dimensions**

unit:mm

1187A

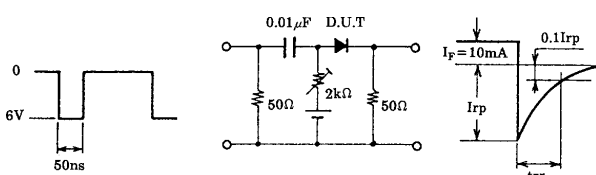
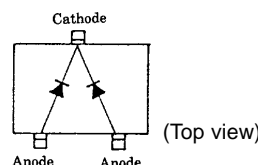
**Specifications****Absolute Maximum Ratings at Ta = 25°C**

Parameter	Symbol	Conditions	Ratings	Unit
Peak Reverse Voltage	$V_{RM}$		85	V
Reverse Voltage	$V_R$		80	V
Peak Forward Current	$I_{FM}$	Unit rating	300	mA
		Total rating	450	mA
Average Rectified Current	$I_O$	Unit rating	100	mA
		Total rating	150	mA
Surge Current(1 $\mu$ s)	$I_{FSM}$	Unit rating	4	A
		total rating	6	A
Allowable Power Dissipation	P		100	mW
Junction Temperature	$T_J$		125	°C
Storage Temperature	$T_{stg}$		-55 to +150	°C

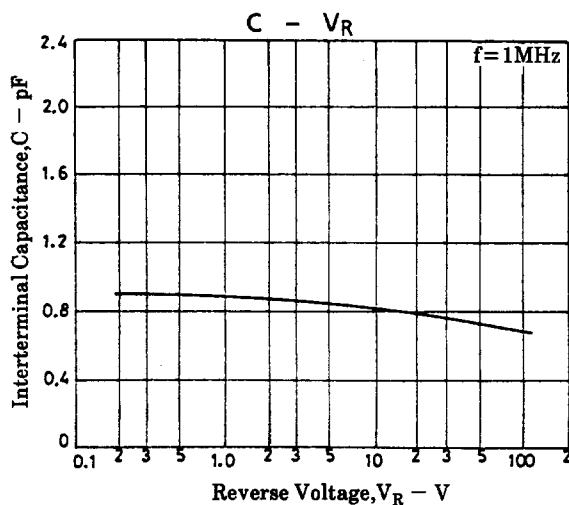
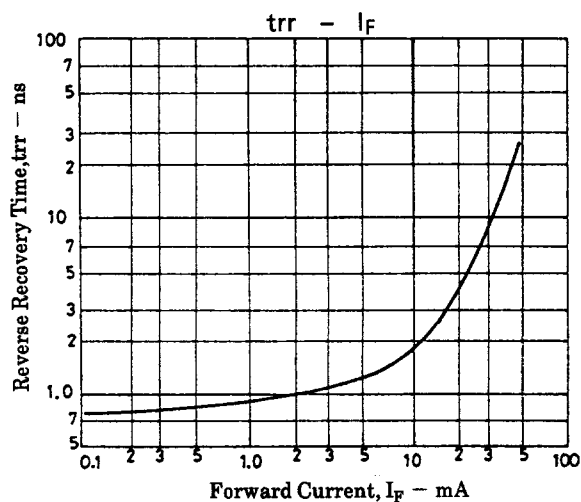
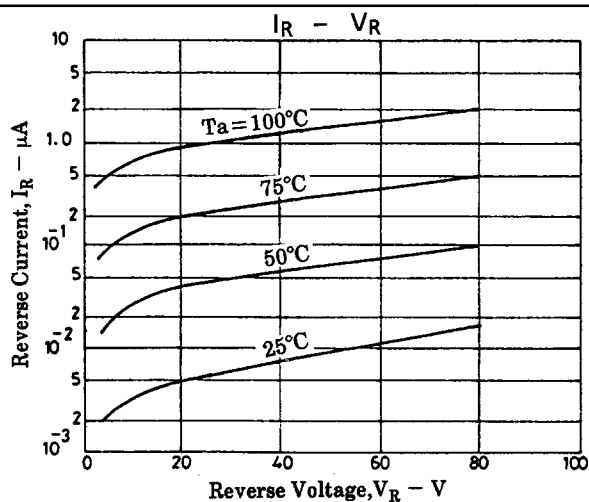
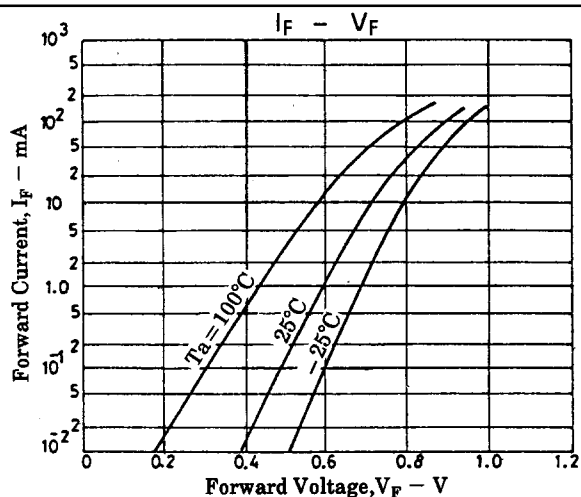
**Electrical Characteristics at Ta = 25°C**

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Forward Voltage	$V_{F1}$	$I_F=1mA$		0.60		V
	$V_{F2}$	$I_F=10mA$		0.72		V
	$V_{F3}$	$I_F=100mA$			1.20	V
Reverse Current	$I_{R1}$	$V_R=30V$			0.1	$\mu$ A
	$I_{R2}$	$V_R=80V$			0.5	$\mu$ A
Interterminal Capacitance	C	$V_R=0V, f=1MHz$			3.0	pF
Reverse Recovery Time	$t_{rr}$	$I_F=10mA, V_R=6V, R_L=50\Omega, I_{rr}=0.1I_{rp}$			4.0	ns

Marking:W6

**Reverse Recovery Time Test Circuit****Electrical Connection**

**SANYO Electric Co.,Ltd. Semiconductor Business Headquarters**  
 TOKYO OFFICE, Tokyo Bldg., 1-10, Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN



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