

**DCC010**

Silicon Epitaxial Planar Type (Series Connection)

Ultrahigh-Speed Switching Diode

An ON Semiconductor Company

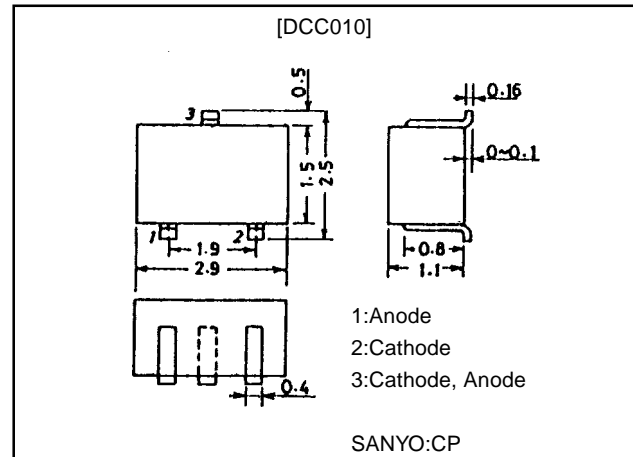
Features

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

Package Dimensions

unit:mm

1147A

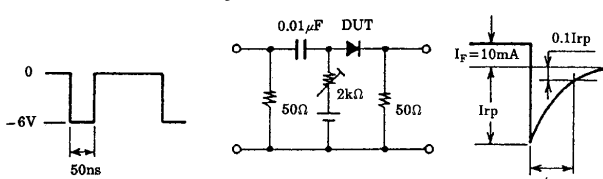
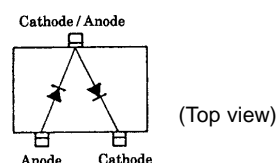
**Specifications****Absolute Maximum Ratings at Ta = 25°C**

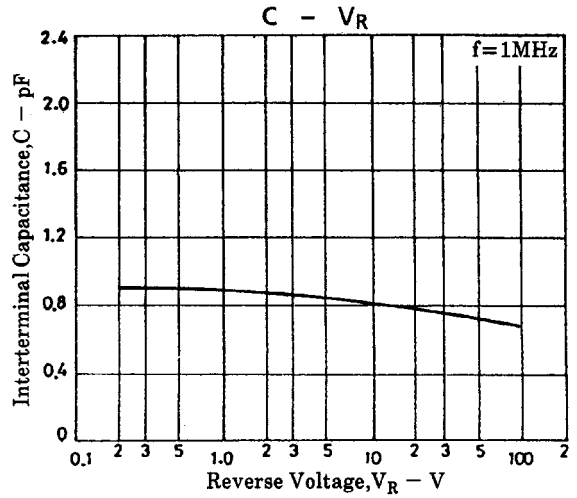
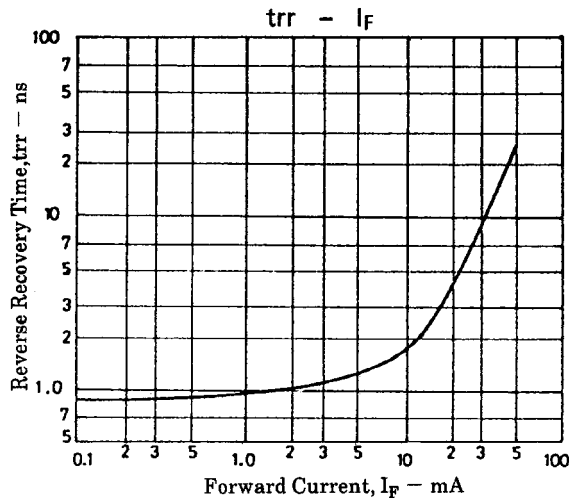
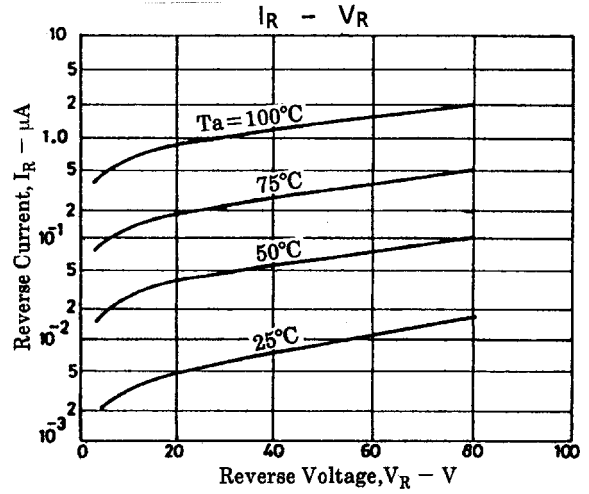
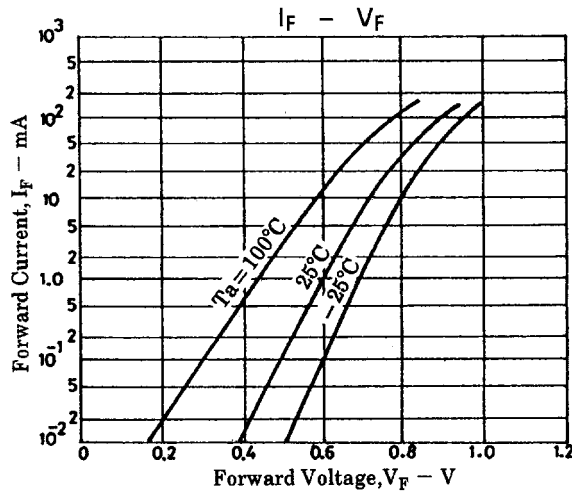
Parameter	Symbol	Conditions	Ratings	Unit
Peak Reverse Voltage	V_{RM}		85	V
Reverse Voltage	V_R		80	V
Peak Forward Current	I_{FM}	Unit Rating	300	mA
			210	mA
Average Rectified Current	I_O	Unit Rating	100	mA
			70	mA
Surge Current (1 μ s)	I_{FSM}	Unit Rating	4	A
			2.8	A
Power Dissipation	P		200	mW
Junction Temperature	T_J		125	°C
Storage Temperature	T_{stg}		-55 to +125	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Forward Voltage	$V_F(1)$	$I_F=1\text{mA}$		0.60		V
	$V_F(2)$	$I_F=10\text{mA}$		0.72		V
	$V_F(3)$	$I_F=100\text{mA}$			1.20	V
Reverse Current	$I_R(1)$	$V_R=30\text{V}$			0.1	μA
	$I_R(2)$	$V_R=80\text{V}$			0.5	μA
Interterminal Capacitance	C	$V_R=0\text{V}$, $f=1\text{MHz}$			3.0	pF
Reverse Recovery Time	t_{rr}	$I_F=10\text{mA}$, $V_R=6\text{V}$, $R_L=50\Omega$, $I_{rr}=0.1I_{rp}$			4.0	ns

· Marking:W7

Reverse Recovery Time Test Circuit**Electrical Connection****SANYO Semiconductor Co., Ltd.**<http://semicon.sanyo.com/en/network>



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