

**DCF010**

Silicon Epitaxial Planar Type (Anode Common)

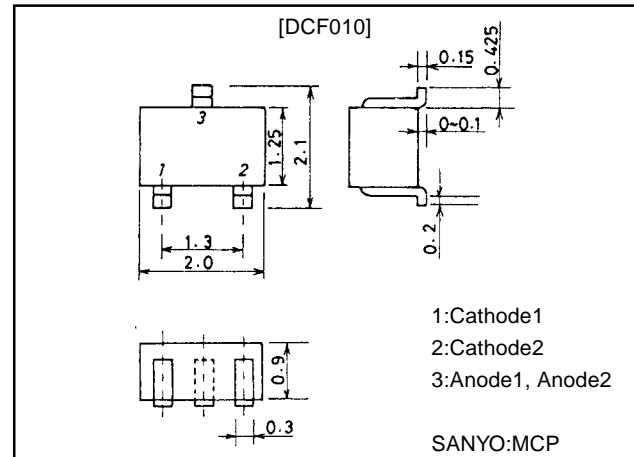
**Ultrahigh-Speed Switching Diode****Features**

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

**Package Dimensions**

unit:mm

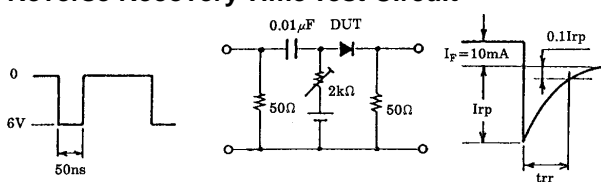
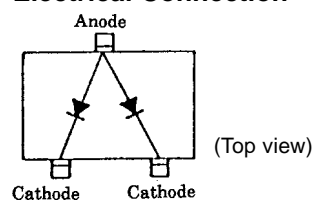
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**Specifications****Absolute Maximum Ratings at Ta = 25°C**

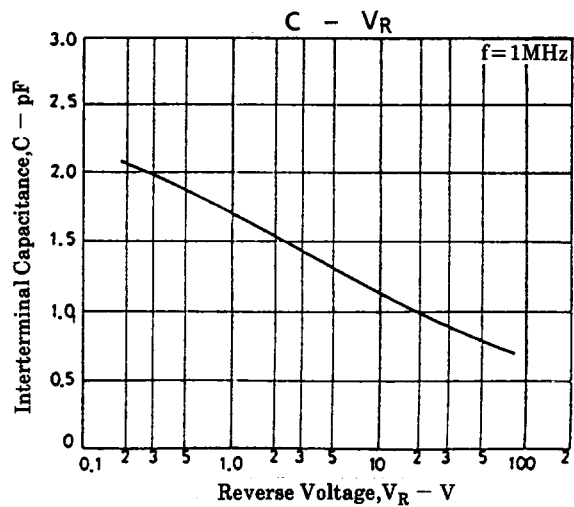
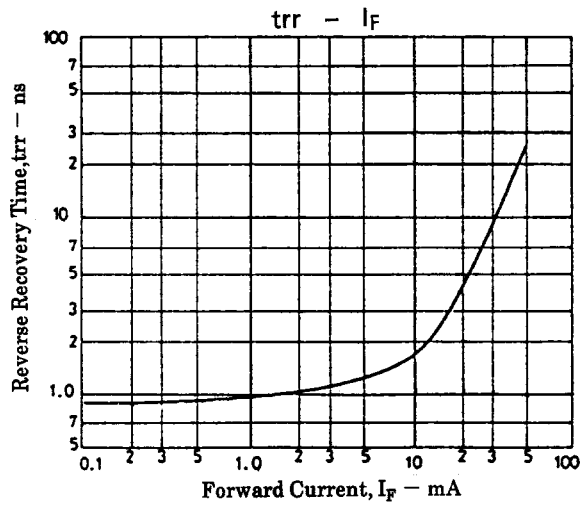
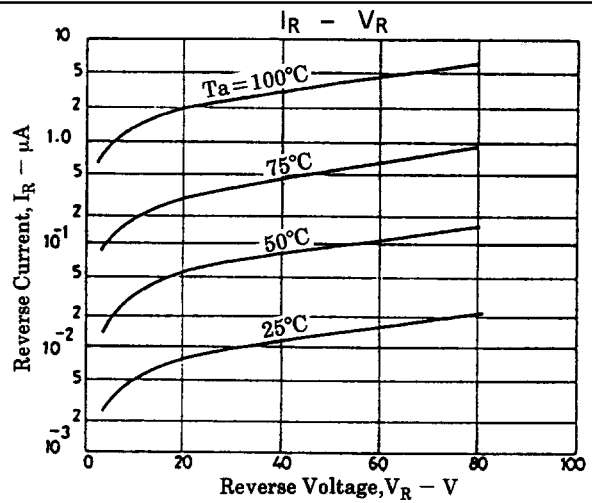
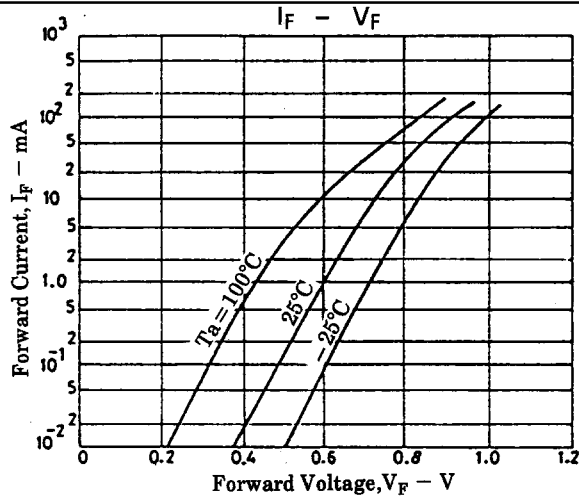
Parameter	Symbol	Conditions	Ratings	Unit
Peak Reverse Voltage	$V_{RM}$		85	V
Reverse Voltage	$V_R$		80	V
Peak Forward Current	$I_{FM}$	Unit rating	300	mA
		Total rating	450	mA
Average Rectified Current	$I_O$	Unit rating	100	mA
		Total rating	150	mA
Surge Current (1 $\mu$ s)	$I_{FSM}$	Unit rating	4	A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

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Forward Voltage	$V_{F1}$	$I_F=1\text{mA}$		0.61		V
	$V_{F2}$	$I_F=10\text{mA}$		0.74		V
	$V_{F3}$	$I_F=100\text{mA}$			1.20	V
Reverse Current	$I_{R1}$	$V_R=30\text{V}$			0.1	$\mu\text{A}$
	$I_{R2}$	$V_R=80\text{V}$			0.5	$\mu\text{A}$
Interterminal Capacitance	C	$V_R=0\text{V}$ , $f=1\text{MHz}$			4.0	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

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

# DCF010



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