



DCF010

Silicon Epitaxial Planar Type (Anode Common)

Ultrahigh-Speed Switching Diode

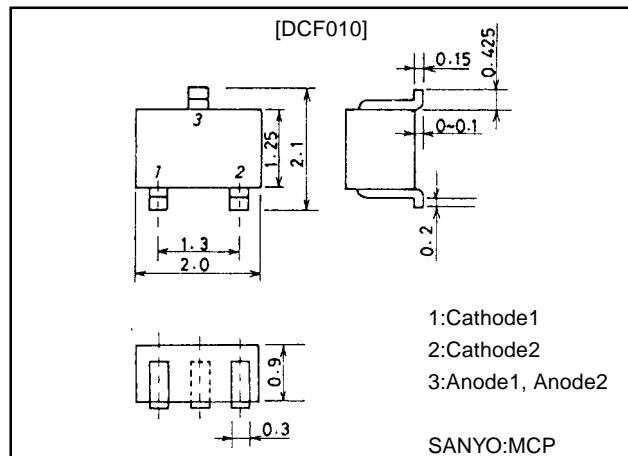
Features

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

Package Dimensions

unit:mm

1186A



Specifications

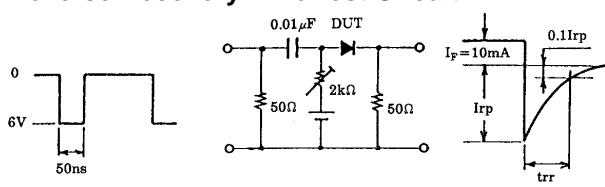
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

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 (1μs)	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

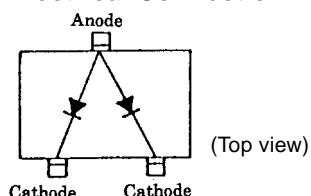
Electrical Characteristics at $T_a = 25^\circ\text{C}$

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	μA
	I_{R2}	$V_R=80\text{V}$			0.5	μA
Interterminal Capacitance	C	$V_R=0\text{V}$, $f=1\text{MHz}$			4.0	pF
Reverse Recovery Time	trr	$I_F=10\text{mA}$, $V_R=6\text{V}$, $R_L=50\Omega$, $Irr=0.1Irp$			4.0	ns

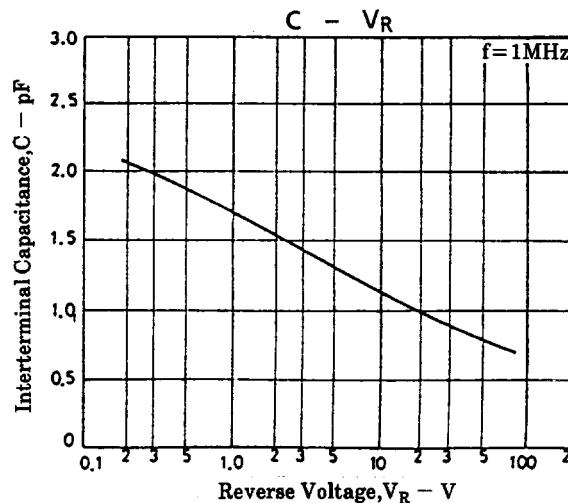
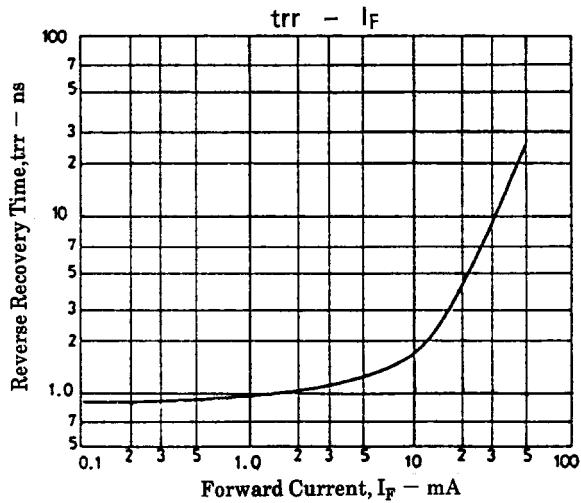
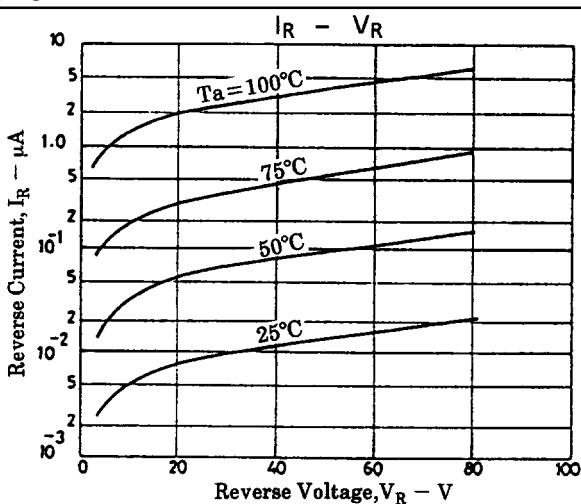
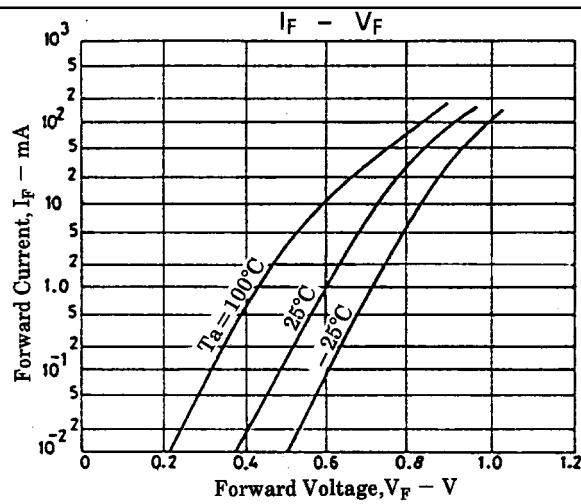
Reverse Recovery Time Test Circuit



Electrical Connection



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