



# DCB010 — Silicon Epitaxial Planar Type (Cathode Common) Very High-Speed Switching Diode

## Features

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

## Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Peak Reverse Voltage	$V_{RM}$		85	V
Reverse Voltage	$V_R$		80	V
Peak Forward Current	$I_{FM}$		300	mA
	$I_{FM}^*$		450	mA
Average Rectified Current	$I_O$		100	mA
	$I_O^*$		150	mA
Surge Current (1 $\mu$ s)	$I_{FSM}$		4	A
	$I_{FSM}^*$		6	A
Allowable Power Dissipation	P		200	mW
Junction Temperature	$T_j$		125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ\text{C}$

\* : Total value

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Forward Voltage	$V_{F1}$	$I_F=1\text{mA}$		0.60		V
	$V_{F2}$	$I_F=10\text{mA}$		0.72		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	$\mu\text{A}$

Marking: W6

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# DCB010

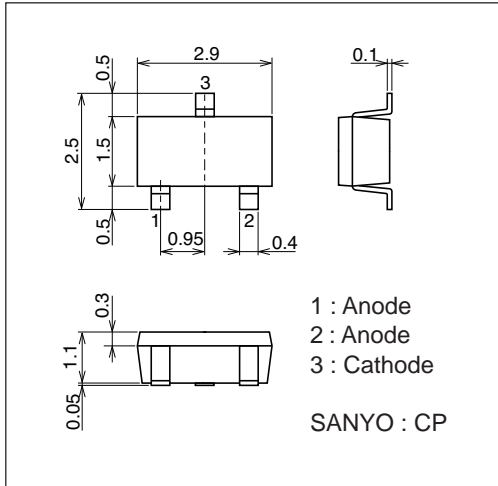
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Interterminal Capacitance	C	$V_R=0V, f=1MHz$			3.0	pF
Reverse Recovery Time	$t_{rr}$	$I_F=10mA, V_R=6V, R_L=50\Omega, I_{rr}=0.1I_{rp}$			4.0	ns

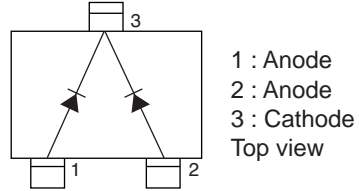
## Package Dimensions

unit : mm (typ)

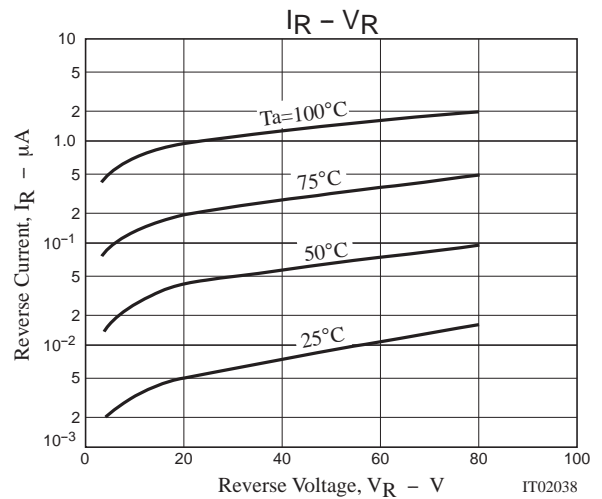
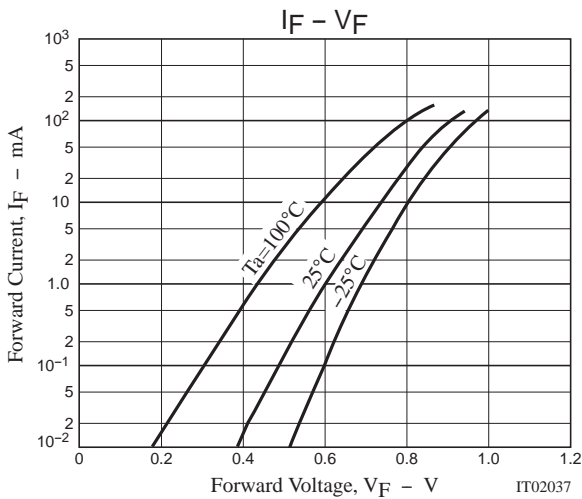
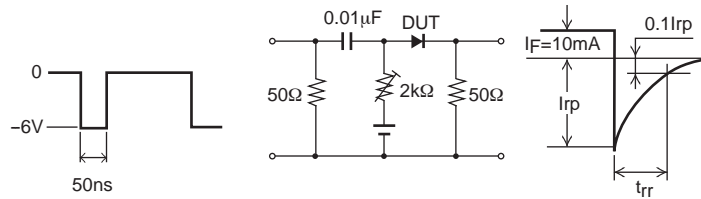
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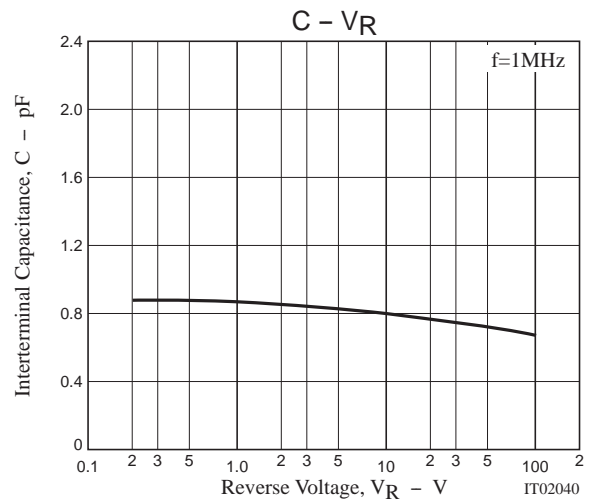
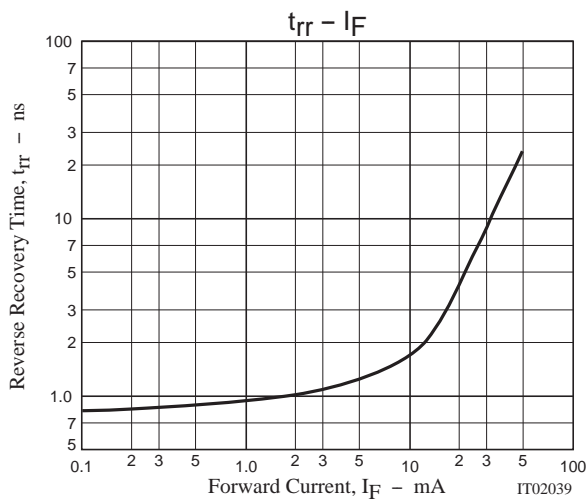


## Electrical Connection



## Reverse Recovery Time Test Circuit





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