



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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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 μ 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	μA
	I_{R2}	$V_R=80\text{V}$			0.5	μA

Marking: W6

Continued on next page.

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DCB010

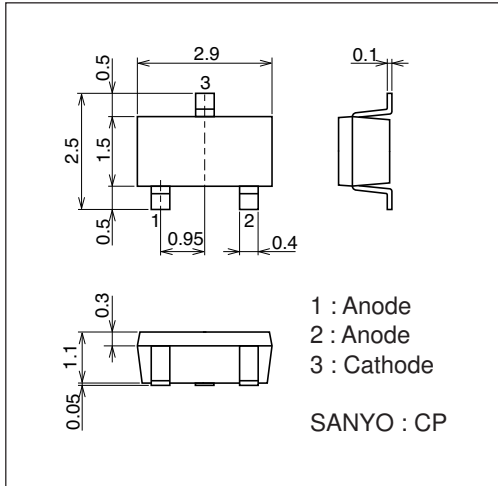
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Interterminal Capacitance	C	$V_R=0V, f=1MHz$			3.0	pF
Reverse Recovery Time	t_{rr}	$I_F=10mA, V_R=6V, R_L=50\Omega, I_{rr}=0.1I_{rp}$			4.0	ns

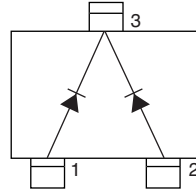
Package Dimensions

unit : mm (typ)

7013A-006

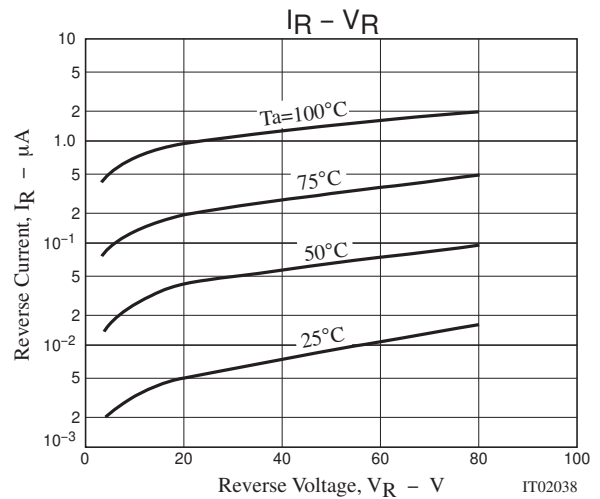
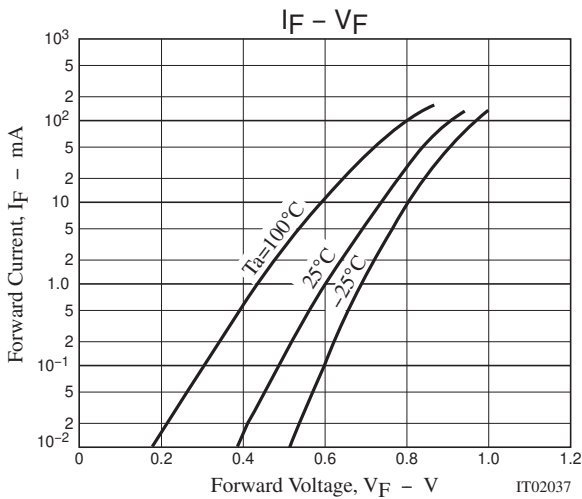
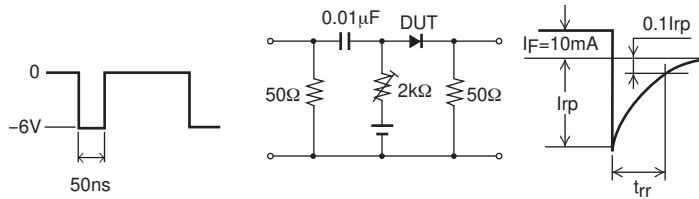


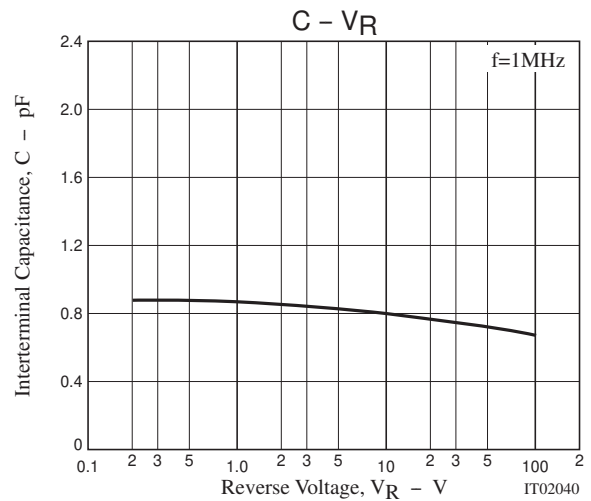
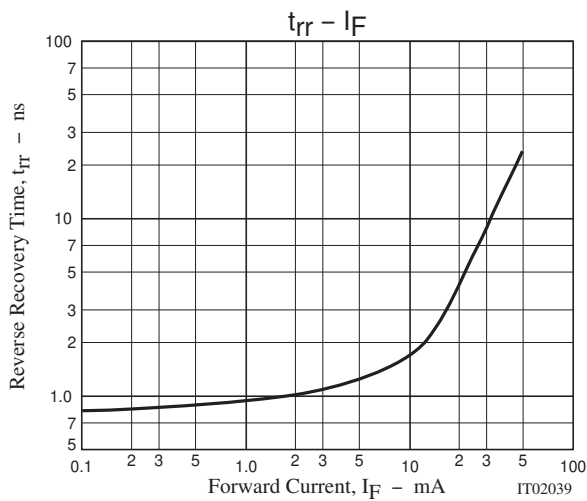
Electrical Connection



1 : Anode
2 : Anode
3 : Cathode
Top view

Reverse Recovery Time Test Circuit





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