



SANYO Semiconductors

DATA SHEET

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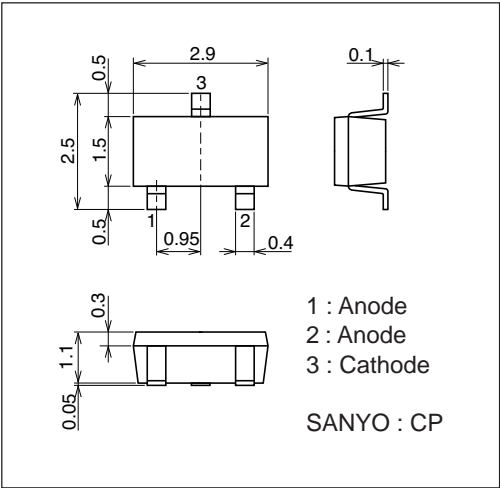
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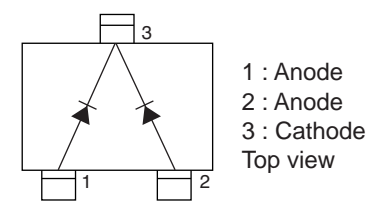
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Interterminal Capacitance	C	$V_R=0V, f=1MHz$			3.0	pF
Reverse Recovery Time	t_{rr}	$I_F=10mA, V_R=6V, R_L=50\Omega, I_{rr}=0.1I_{rp}$			4.0	ns

Package Dimensions

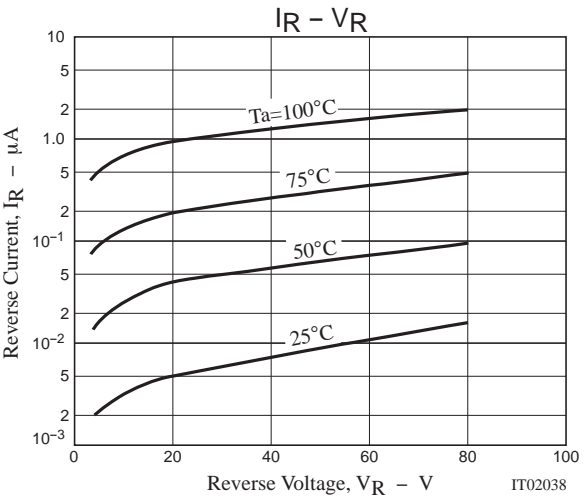
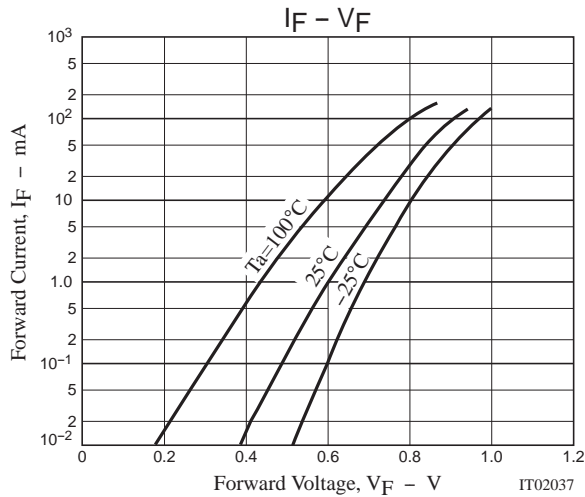
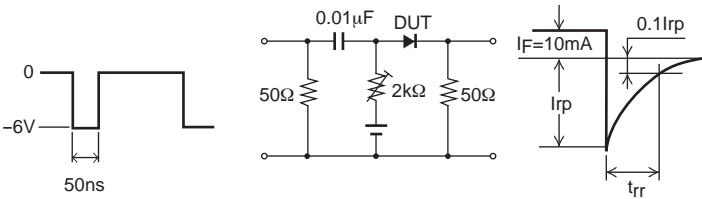
unit : mm (typ)
7013A-006

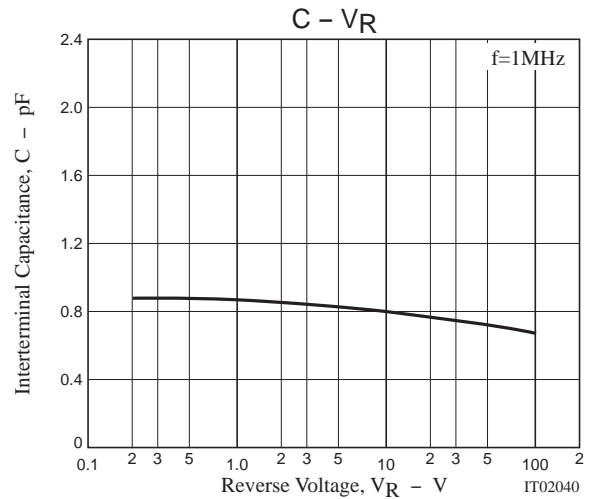
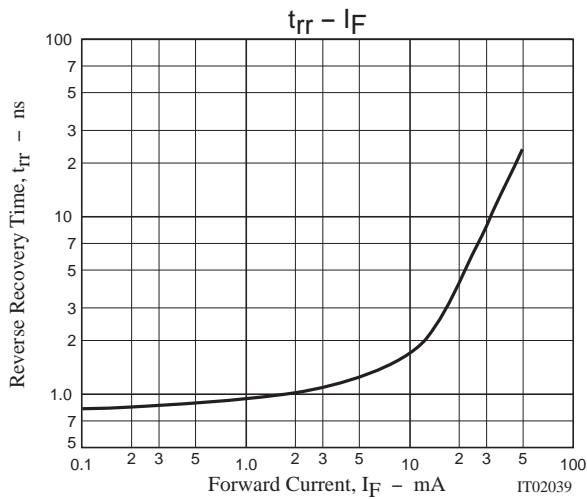


Electrical Connection



Reverse Recovery Time Test Circuit





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