



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	VRM			85	V
Reverse Voltage	VR			80	V
Peak Forward Current	IFM		300	mA	
	IFM*		450	mA	
Average Rectified Current	IO		100	mA	
	IO*		150	mA	
Surge Current (1μs)	IFSM		4	A	
	IFSM*		6	A	
Allowable Power Dissipation	P		200	mW	
Junction Temperature	T _j		125	°C	
Storage Temperature	T _{stg}		-55 to +125	°C	

* : Total value

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Forward Voltage	VF1	IF=1mA		0.60		V
	VF2	IF=10mA		0.72		V
	VF3	IF=100mA			1.20	V
Reverse Current	IR1	V _R =30V			0.1	μA
	IR2	V _R =80V			0.5	μA

Marking: W6

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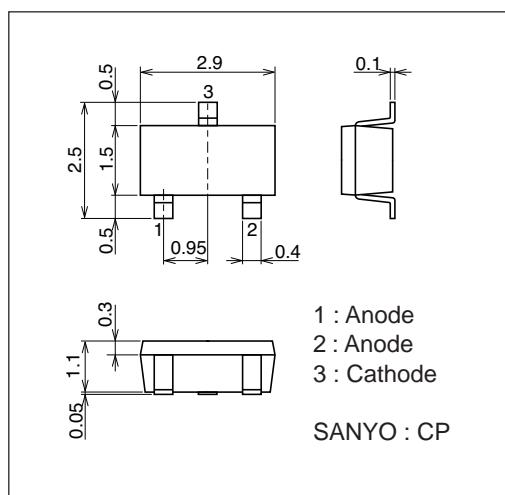
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Interterminal Capacitance	C	$V_R=0V, f=1MHz$			3.0	pF
Reverse Recovery Time	t_{rr}	$I_F=10mA, V_R=6V, R_L=50\Omega, I_{rp}=0.1I_{rp}$			4.0	ns

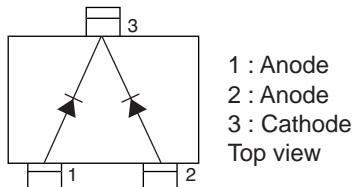
Package Dimensions

unit : mm (typ)

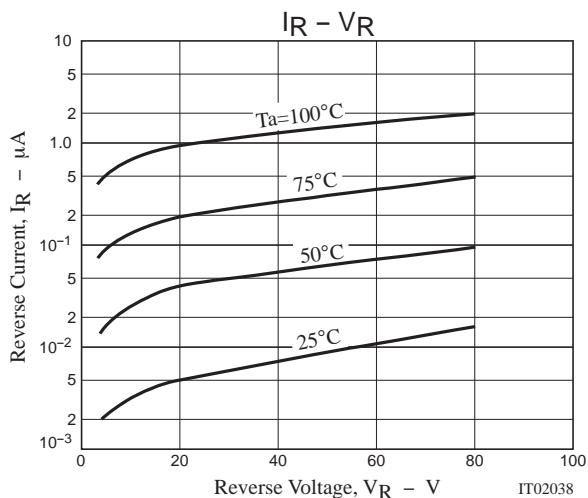
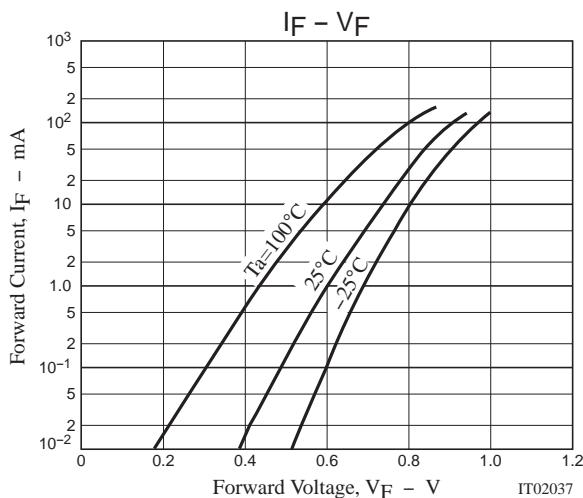
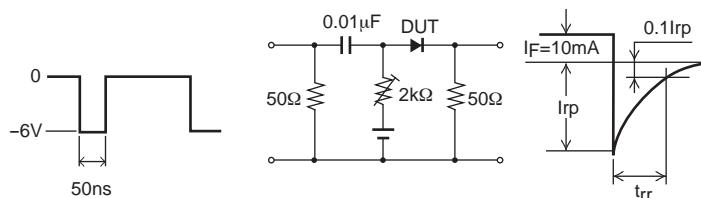
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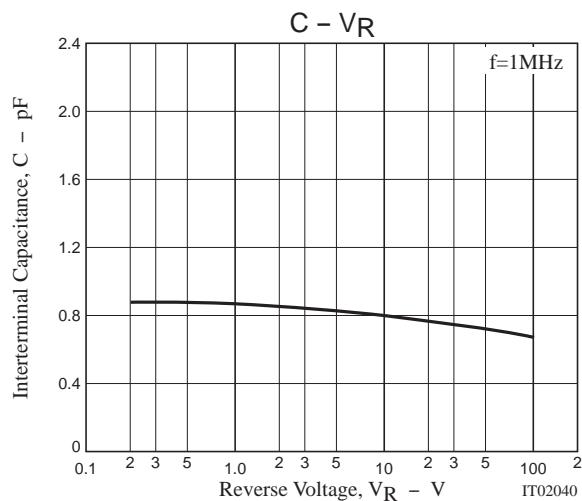
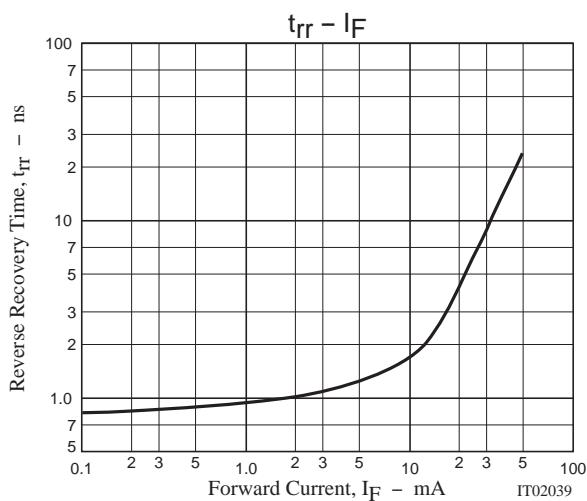


Electrical Connection



Reverse Recovery Time Test Circuit





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