

DCA010



Very High-Speed Switching Diode

ON Semiconductor®

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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 Ta=25°C

Parameter	Symbol	Conditions	Rating	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		200	mW
Junction Temperature	T _j		125	°C
Storage Temperature	T _{stg}		-55to +150	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

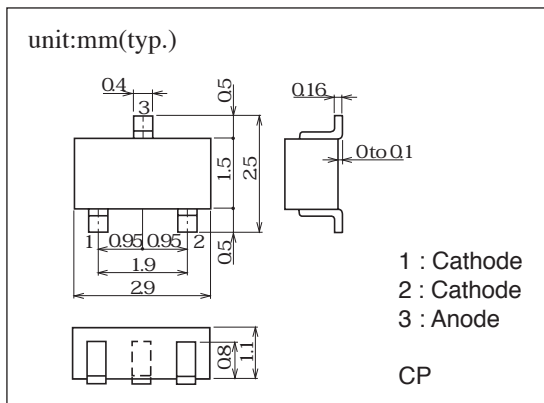
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Rating			Unit
			min	typ	max	
Forward Voltage	V _{F1}	I _F =1mA		0.61		V
	V _{F2}	I _F =10mA		0.74		V
	V _{F3}	I _F =100mA			1.20	V
Reverse Current	I _{R1}	V _R =30V			0.1	μA
	I _{R2}	V _R =80V			0.5	μA
Interterminal Capacitance	C	V _R =0V, f=1MHz			4.0	pF
Reverse Recovery Time	t _{rr}	I _F =10mA, V _R =6V, R _L =50Ω, I _{rr} =0.1I _{rp}			4.0	ns

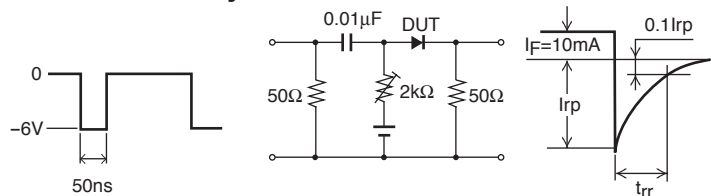
Marking: W5

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

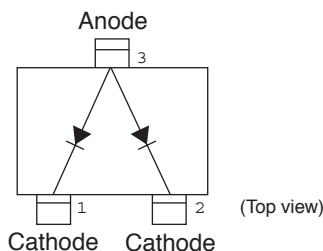
Package Dimensions



Reverse Recovery Time Test Circuit

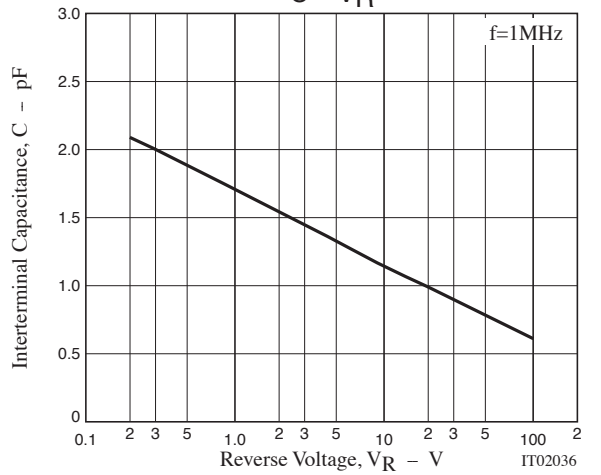
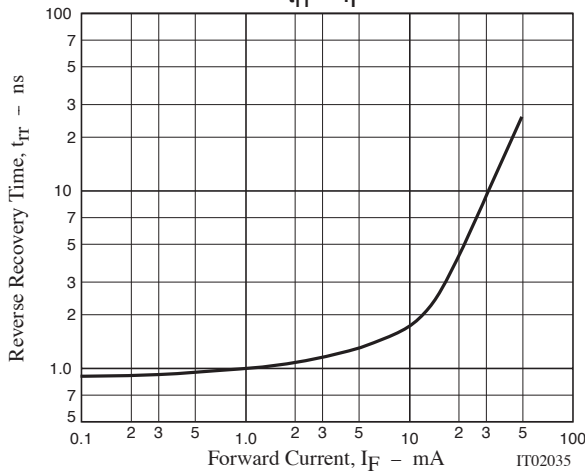
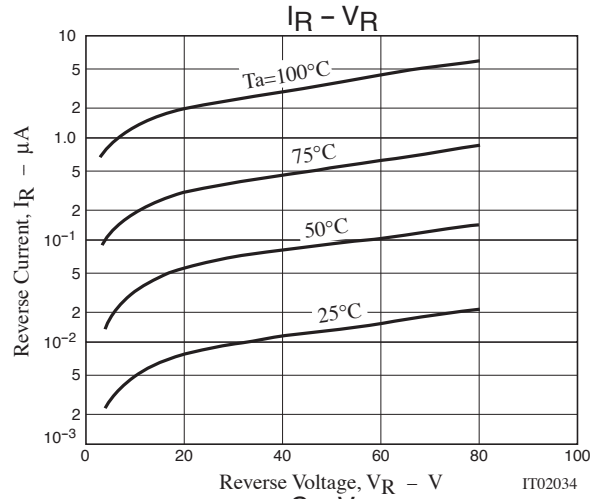
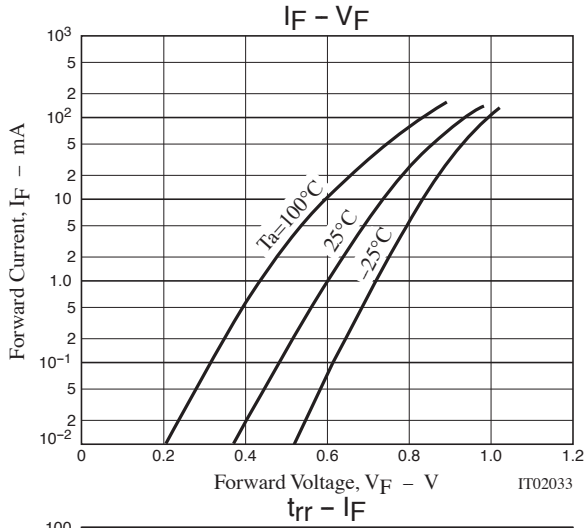


Electrical Connection



ORDERING INFORMATION

See detailed ordering and shipping information on page 2 of this data sheet.



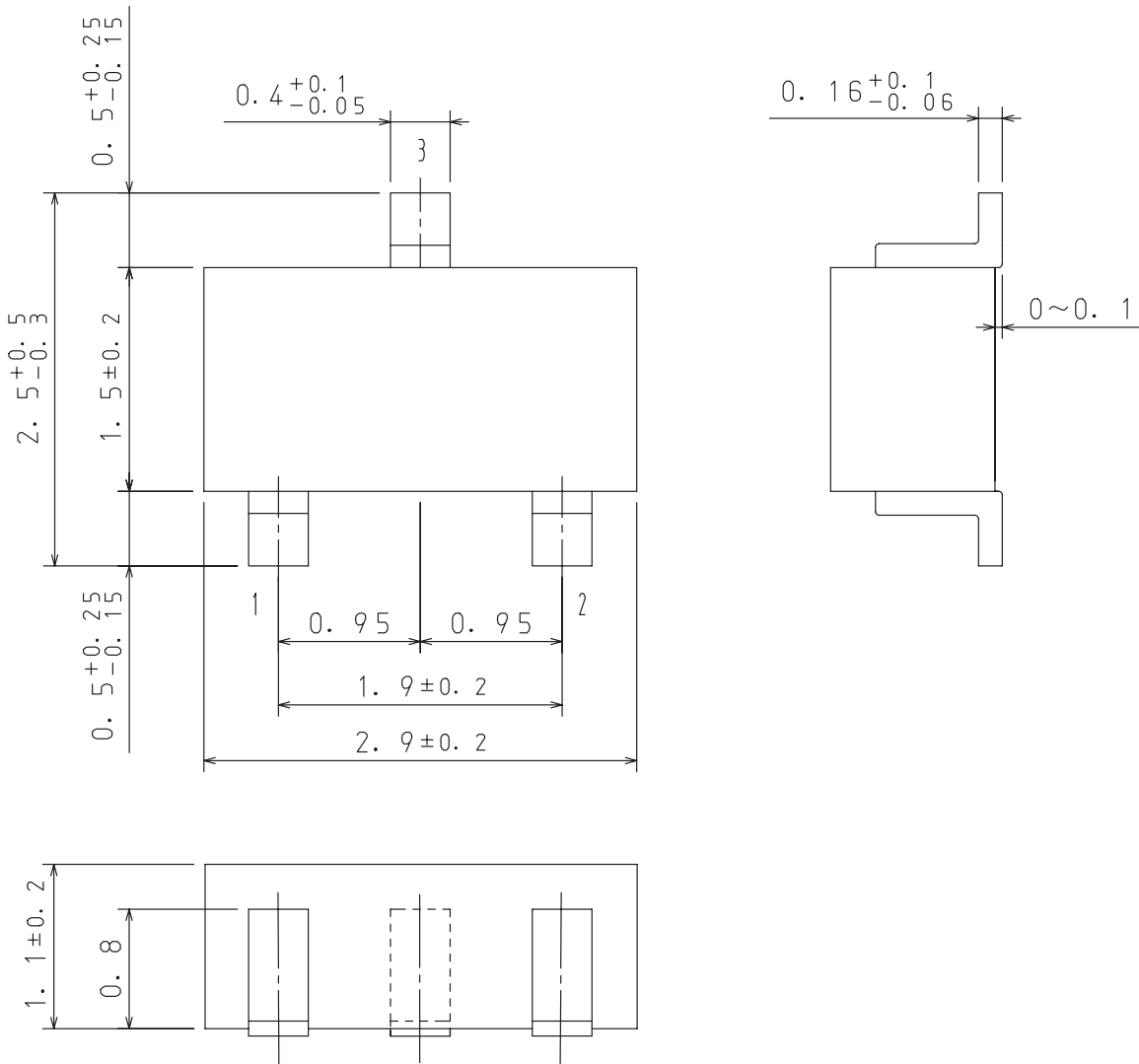
ORDERING INFORMATION

Device	Package	Shipping	memo
DCA010-TB-E	CP	3,000 pcs. / reel	Pb-Free

Package Dimensions

SC-59 / CP
CASE 318AN
ISSUE O

unit : mm



Dimensions with no tolerance specified represent typical values.

There may be resin burrs that cannot be seen apparently from the drawing.

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