SB01-05C

Schottky Barrier Diode 50V, 0.1A, Low IR, Single CP



http://onsemi.com

Applications

· High frequency rectification (switching regulators, converters, choppers)

Features

- Low forward voltage (VF max=0.55V)
- · Low switching noise
- · Low leakage current and high reliability due to highly reliable planar structure

Specifications

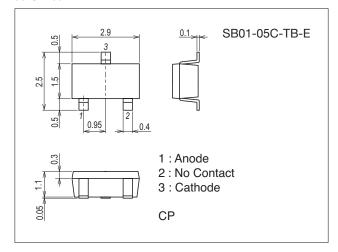
Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		50	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		55	V
Average Output Current	IO		100	mA
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	2	Α
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°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.

Package Dimensions

unit : mm (typ) 7013A-004



Product & Package Information

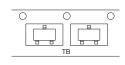
• Fast reverse recovery time (t_{rr} max=10ns)

• Package : CP

• JEITA, JEDEC : SC-59, TO-236, SOT-23, TO-236AB

• Minimum Packing Quantity: 3,000 pcs./reel

Packing Type: TB





Marking

Electrical Connection



ORDERING INFORMATION

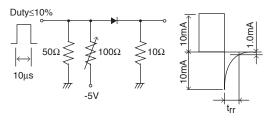
See detailed ordering and shipping information on page 2 of this data sheet.

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
		Conditions	min	typ	max	Offic
Reverse Voltage	VR	I _R =50μA,Tj=25°C	50			V
Forward Voltage	VF	IF=100mA,Tj=25°C			0.55	V
Reverse Current	IR	V _R =25V,Tj=25°C			15	μΑ
Interterminal Capacitance	С	V _R =10V, f=1MHz		4.4		pF
Reverse Recovery Time	t _{rr}	I _F =I _R =10mA, See specified Test Circuit.			10	ns
Thermal Resistance	Rthj-a(1)			560		°C/W
	Rthj-a(2)	Mounted in Cu-foiled area of 16mm ² ×0.2mm		410		°C/W
		on glass epoxy board		410		C/VV

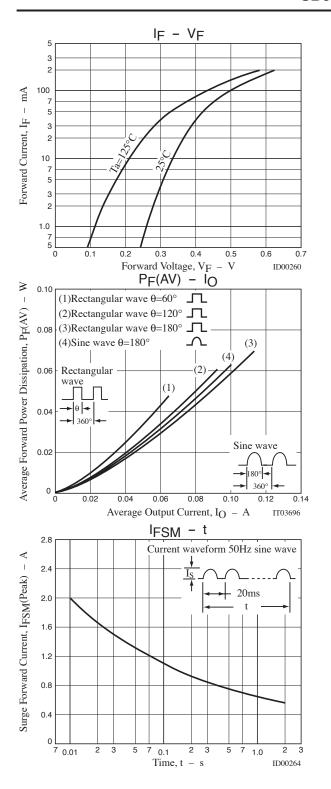
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

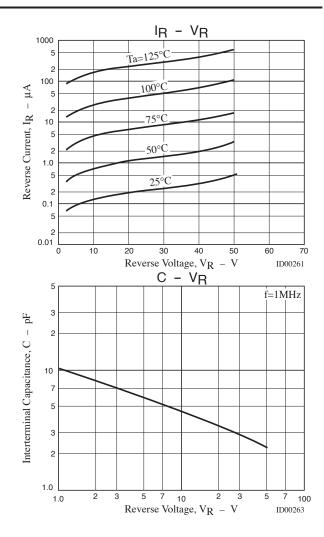
t_{rr} Test Circuit



Ordering Information

Device	Package	Shipping	memo	
SB01-05C-TB-E	CP	3,000pcs./reel	Pb Free	



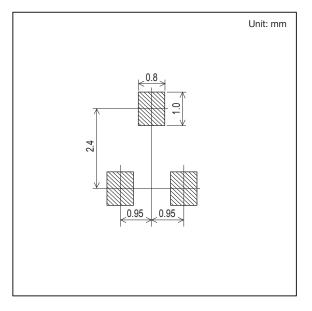


Outline Drawing

SB01-05C-TB-E

Mass (g) Unit 0.013 mm 0. 5-0. 25 2. 9±0. 15 A 3 5±0.2 5±0.1 0. 4^{+0. 1} $0.5^{+0.25}_{-0.15}$ 2 0. 95 0.3±0. 1. 1±0.15 0.05±0.05 *1:Lot indication

Land Pattern Example



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