# SS3003CH

## Schottky Barrier Diode 30V, 3.0A, Low VF, Single CPH6



http://onsemi.com

#### **Applications**

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

#### **Features**

· Small switching noise

- · Halogen free compliance
- · Low forward voltage (IF=3A, VF max=0.42V)
- · Ultrasmall package permitting applied sets to be small and slim

#### **Specifications**

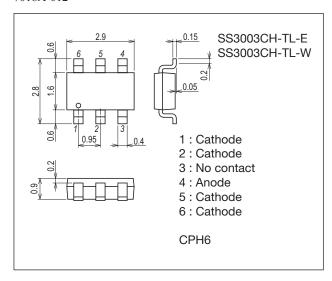
#### **Absolute Maximum Ratings** at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		30	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		30	V
Average Output Current	IO		3.0	Α
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	20	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) 7018A-012



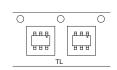
#### **Product & Package Information**

• Package : CPH6

• JEITA, JEDEC : SC-74, SOT-26, SOT-457

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

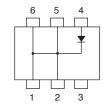
#### Packing Type: TL



#### **Marking**



#### **Electrical Connection**



#### ORDERING INFORMATION

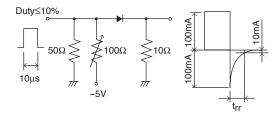
See detailed ordering and shipping information on page 2 of this data sheet.

#### Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
		Conditions	min	typ	max	Offic
Reverse Voltage	VR	I <sub>R</sub> =2.0mA	30			V
Forward Voltage	VF	IF=2.0A		0.335	0.385	V
		I <sub>F</sub> =3.0A		0.37	0.42	V
Reverse Current	IR	V <sub>R</sub> =15V			1.4	mA
Interterminal Capacitance	С	V <sub>R</sub> =10V, f=1MHz		90		pF
Reverse Recovery Time	t <sub>rr</sub>	IF=IR=100mA			20	ns
Thermal Resistance	Rth(j-a)	When mounted on ceramic substrate (900mm²×0.8mm)		50		°C/W

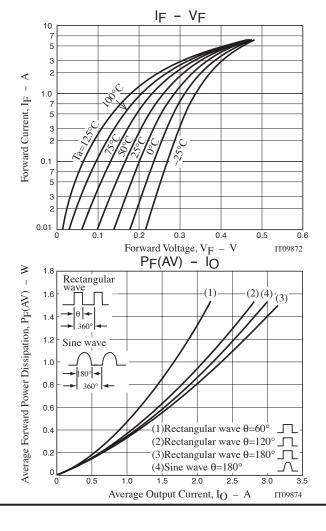
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

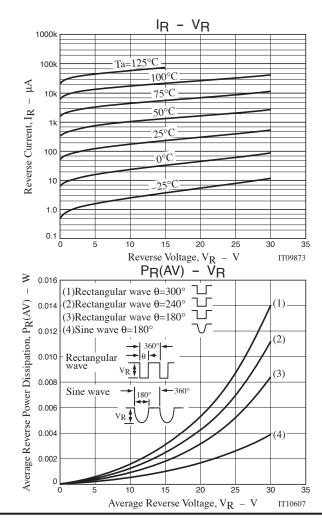
#### trr Test Cicuit



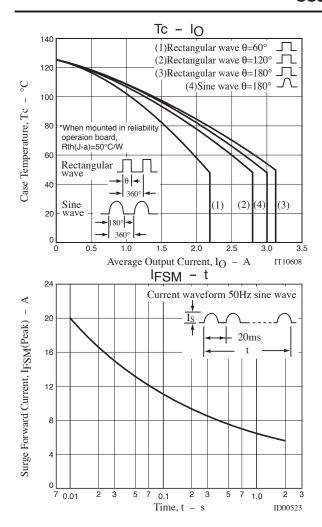
#### **Ordering Information**

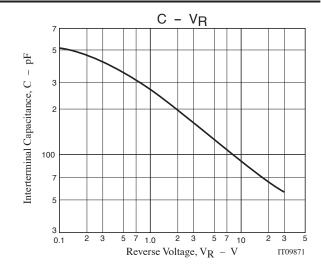
Device	Package	Shipping	memo	
SS3003CH-TL-E	CPH6	3,000pcs./reel	Pb-Free	
SS3003CH-TL-W	CPH6	3,000pcs./reel	Pb-Free and Halogen Free	





#### SS3003CH



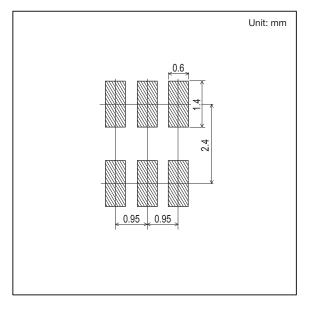


#### **Outline Drawing**

SS3003CH-TL-E, SS3003CH-TL-W

## Mass (g) Unit 0.015 mm 0. 15+0. 1 2. 9±0. 0.6±0. \*1 | \*1 0. 05±0.05 8±0.15 6±0. \*1 0. 95 PIN#1 0.05 \$ \*1:Lot indication

#### **Land Pattern Example**



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