



DC/DC Converter SC 01NST Series



- DC/DC unregulated converter modules
- 1s short circuit proof
- 1kVdc isolation voltage
- UL 94V-0 package material

- DC/DC Wandler unreguliert
- 1s kurzschlussfest
- 1kVdc galvanische Trennung
- UL 94V-0 Gehäusematerial und Vergussmasse

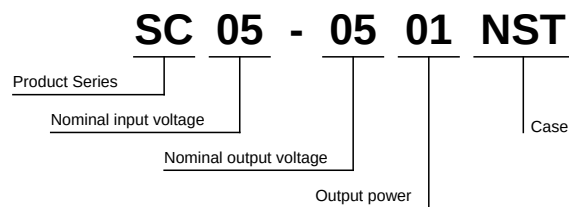
- Convertisseur DC/DC non régulé
- Résistant 1s au court-circuit
- Isolation galvanique 1kVdc
- Matériaux de boîtier et masse de remplissage conformes UL 94V-0

Product Range

Typenübersicht

Sommaire des types

Model	Input nominal	Input range	Input current @ Uin nom.		Uout	Output lout max.	power	Efficiency typ.
			full load	no load				
Single								
SC05-0501NST	5VDC	4.5...5.5VDC	253mA	40mA	5.0VDC	200mA	1.0W	79%
SC05-1201NST	5VDC	4.5...5.5VDC	255mA	40mA	12VDC	84mA	1.0W	79%
SC05-1501NST	5VDC	4.5...5.5VDC	251mA	40mA	15VDC	67mA	1.0W	80%
SC12-0501NST	12VDC	10.8...13.2VDC	103mA	15mA	5.0VDC	200mA	1.0W	81%
SC12-1201NST	12VDC	10.8...13.2VDC	103mA	15mA	12VDC	84mA	1.0W	81%
SC12-1501NST	12VDC	10.8...13.2VDC	102mA	15mA	15VDC	67mA	1.0W	82%
SC24-0501NST	24VDC	21.6...26.4VDC	52mA	7mA	5.0VDC	200mA	1.0W	80%
SC24-1201NST	24VDC	21.6...26.4VDC	52mA	7mA	12VDC	84mA	1.0W	80%
SC24-1501NST	24VDC	21.6...26.4VDC	52mA	7mA	15VDC	67mA	1.0W	81%



Specifications

Spezifikationen

Specifications

All values refer to an ambient temperature of 25°C and nominal rated values where nothing else is specified.

Input Specifications

Characteristic	Conditions	min	typ	max	unit
U_{IN} Input voltage		-10%	5 / 12 / 24	+10%	V
U_{UVLO} Under voltage lockout					V
Max. input current at full load		See	product	range	A
No load input current		See	product	range	mA

Output Specifications

Characteristic	Conditions	min	typ	max	unit
U_{ACC} Output voltage accuracy		±3			%
Output voltage adjust					%
Line regulation				±1.2	%
Load regulation				10	%
Load transient recovery time					µs
Load transient error band					%
Temperature coefficient				±0.05	%/K
Ramp up time					ms
Start up time					ms
Ripple and noise	BW = 20MHz	100			mVpp
Current limit					%
Over voltage protection					%
Short circuit protection					%
Short circuit characteristic		Momentary 1s			

General Specifications

Characteristic	Conditions	min	typ	max	unit
U_{ISO} Isolation voltage	in/out, in/case, out/case	1000			V
R_{ISO} Isolation resistance		10G			Ohm
R_{ISO} Switching frequency	Fixed	5&12V: 90 / 24V: 80			kHz
Approvals					
MTBF		1.7M			h
Case material		non-conductive black plastic			

	Compound material			
	PCB material			
	Weight		5&12V: 1.3 / 24V: 1.7	gr
	Dimensions		11.6 x 6.0 (7.5) x 10.2	mm
	Soldering infos		275°C for 10	s

EMC Specifications

Characteristic		Conditions	min	typ	max	unit
	EMC conducted					

Environmental Specifications

Characteristic		Conditions	min	typ	max	unit
T _{CASE}	Operation temperature		-40...+85			°C
T _{AMB}	Storage temperature		-55...+125			°C
T _{SD}	Thermal shutdown range		Tcase = max.100			°C

Own notes

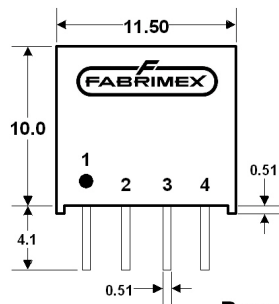
Eigene Notizen

Vos notices

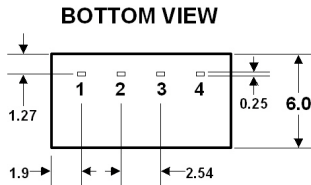
No EMC graph available yet, please contact factory

No EMC filter available yet, please contact factory

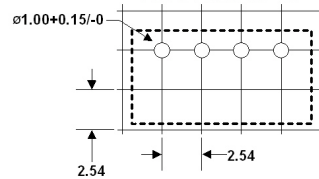
Normal tolerance 1/10 ± 0.5 mm, 1/100 ± 0.25 mm; Pin tolerance ± 0.5 mm diameter, NP = No pin, NC = Not connected



Pin	Single
1	-Vi
2	+Vi
3	-Vo
4	+Vo



Recommended Footprint,
BOTTOM VIEW



Cleaning

The modules are cleanable with the today's known and in the electronics industry usually used products. Due to the different cleaning processes and new available products, we highly recommend to do a compatibility test when using the converters the first time.

Waschen

Die Module sind waschbar mit den heute bekannten und in der Elektronikindustrie üblichen Reinigungsmitteln. Bedingt durch die verschiedenen Reinigungsprozesse und neu auf den Markt kommende Mittel, raten wir dringend beim Ersteinsatz der Konverter eine Verträglichkeitsprüfung vorzunehmen.

Lavage

Les modules sont lavables avec les solvants couramment utilisés dans l'industrie électronique. Dû aux différents processus de lavage et aux nouveaux détergents disponibles sur le marché, il est strictement recommandé de faire un test de compatibilité avant la première utilisation.

Notice: All statements, technical information, and recommendations related to FABRIMEX's products are based on information believed to be reliable, but the accuracy or completeness thereof is not guaranteed. Before utilizing the product, the user should determine the suitability of the product for its intended use.



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