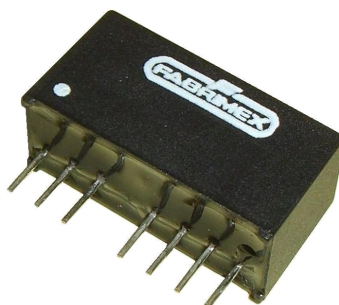




Reg. Nr. 12666

DC/DC Ultra Wide Input Converter SCU 03 Series



- 3W Isolated Output
- Regulated Outputs
- 4:1 input Range
- Continuous Short Circuit Protection
- Compact SIP-8 Package
- Remote On/Off Control
- Efficiency to 85%
- 1500VDC Isolation
- Input Under Voltage Protection
- Without Tantalum Capacitors inside

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Product Range

Typenübersicht

Sommaire des types

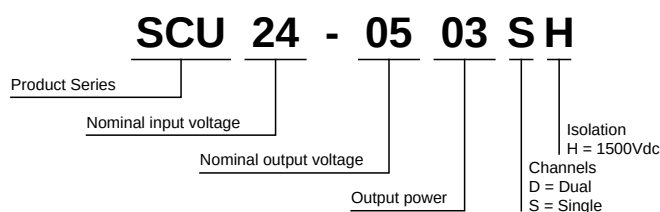
Model	Input		Input current @ Uin nom.		Uout	Output		Efficiency
	nominal	range	full load	no load		lout max.	power	
Single								
SCU24-3V303SH	24VDC	9...36VDC	122mA	4mA	3.3VDC	700mA	2.3W	79%
SCU24-0503SH	24VDC	9...36VDC	154mA	4mA	5.0VDC	600mA	3W	81%
SCU24-1203SH	24VDC	9...36VDC	150mA	8mA	12VDC	250mA	3W	84%
SCU24-1503SH	24VDC	9...36VDC	150mA	8mA	15VDC	200mA	3W	84%

SCU48-3V303SH	48VDC	18...72VDC	61mA	3mA	3.3VDC	700mA	2.3W	79%
SCU48-0503SH	48VDC	18...72VDC	76mA	3mA	5.0VDC	600mA	3W	82%
SCU48-1203SH	48VDC	18...72VDC	74mA	5mA	12VDC	250mA	3W	85%
SCU48-1503SH	48VDC	18...72VDC	75mA	5mA	15VDC	200mA	3W	84%
Dual								
SCU24-0503DH	24VDC	9...36VDC	154mA	8mA	+5.0VDC -5.0VDC	+300mA -300mA	1.5W 1.5W	81%
SCU24-1203DH	24VDC	9...36VDC	150mA	12mA	+12VDC -12VDC	+125mA -125mA	1.5W 1.5W	84%
SCU24-1503DH	24VDC	9...36VDC	151mA	12mA	+15VDC -15VDC	+100mA -100mA	1.5W 1.5W	83%
SCU48-0503DH	48VDC	18...72VDC	76mA	5mA	+5.0VDC -5.0VDC	+300mA -300mA	1.5W 1.5W	82%
SCU48-1203DH	48VDC	18...72VDC	75mA	10mA	+12VDC -12VDC	+125mA -125mA	1.5W 1.5W	84%
SCU48-1503DH	48VDC	18...72VDC	75mA	10mA	+15VDC -15VDC	+100mA -100mA	1.5W 1.5W	83%

Nomenclature

Nomenklatur

Nomenclature



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		See	product	range	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		±1.5			%
Output voltage adjust					%
Line regulation			±0.5		%
Load regulation	10% / 100% step load change		s: ±0.5, d: ±1		%
Load transient recovery time	10% / 100% step load change		< 500		µs
Load transient error band			±6		%
Temperature coefficient			±0.03		%/K
Ramp up time					ms
Start up time					ms

	Ripple and noise	BW = 20MHz	50			mVpp
	Current limit					%
	Over voltage protection					%
	Short circuit protection					%
	Short circuit characteristic		continuous			

General Specifications

Characteristic		Conditions	min	typ	max	unit
U _{ISO}	Isolation voltage		1500			V
R _{ISO}	Isolation resistance		> 1G			Ohm
R _{ISO}	Switching frequency		100			kHz
	Approvals					
	MTBF					h
	Case material		Non-Conductiv Black Plastic			
	Compound material					
	PCB material					
	Weight		4.8			gr
	Dimensions		21.8 x 9.2 x 11.1			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 = 100			°C

Own notes

Eigene Notizen

Vos notices

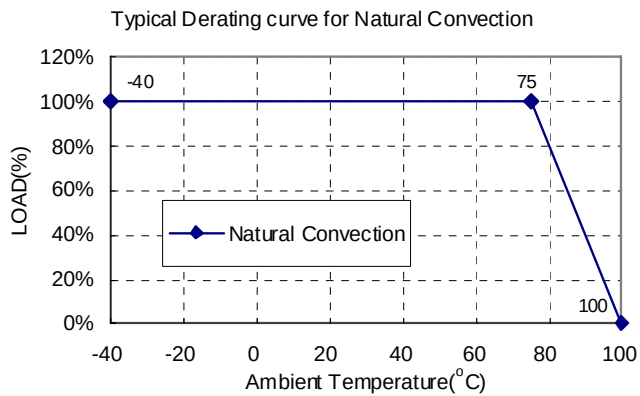
No EMC graph available yet, please contact factory

No EMC filter available yet, please contact factory

Derating SCU 03

The operating case temperature range of SCU 03 series is -40...+85. When operating the SCU 03 series, proper derating or cooling is needed. The following curves are the derating curves of SCU 03 without heat sink. Please note that these are relative values in a test environment. Ambient temperature can not be exactly defined in an application, only the case temperature.

Power Dissipated vs Ambient Temperature for SCU 03



Own notes

Eigene Notizen

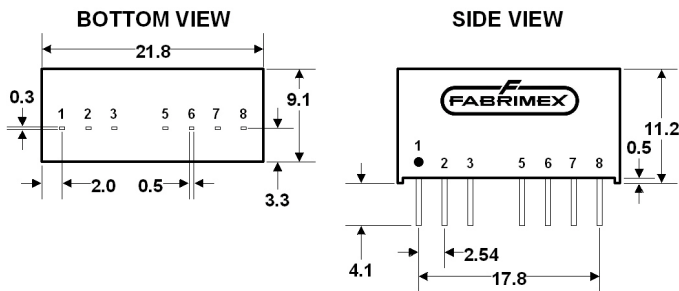
Vos notices

Case

Gehäuse

Boîtier

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	Dual	Pin
1	-Vi	-Vi	1
2	+Vi	+Vi	2
3	on/off	on/off	3
5	NC	NC	5
6	+Vo	+Vo	6
7	-Vo	Com	7
8	NC	-Vo	8

Cleaning

Waschen

Lavage

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.

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.

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.

Own notes

Eigene Notizen

Vos notices

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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