

Unregulated
Case Style: SIP 7

COMMERCIAL-INDUSTRIAL
DC/DC Converters

1 Watt / 2 Watt
Series: S7U

Electrical specifications:

Input voltage range: +/- 10%
Output voltage accuracy: +/- 5% **
Line Voltage regulation: +/- 1,2% / 1% of Vin max.
Load Voltage regulation: 5V output type 15% max.
(10% to 100% full load) 9V ~ 24V output types 10% max.
Output Ripple & Noise: 1W; typ. 50mVp-p
2W; max. 150mVp-p

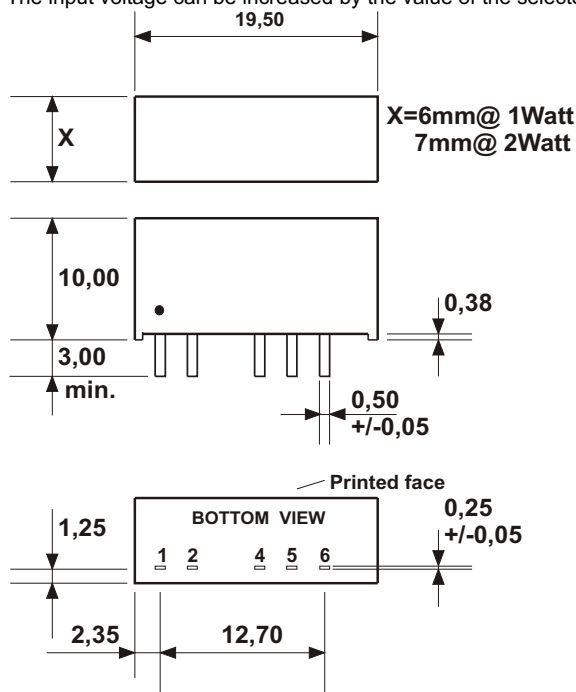
Efficiency: up to 85%
Short circuit protection: 1,0 second
optional (Part-No. /S): continuous
Operating temperature: -40°C to +85°C
Isolation voltage: min. 1000V DC
Isolation optional (Part-No. /H): min. 2000V DC
Part-Nr. /2 0,25W output power
Part-Nr. /5 0,50W output power
Part-Nr. /7 0,75W output power

** Note: Measured @25°C with the condition
of Vin = nominal and full load

CAUTION: NO INPUT POLARITY CHANGE ALLOWED!

Single Output			1 Watt	2 Watt	Dual Output			1 Watt	2 Watt
Part-No.	Input Voltage	Output Voltage	Output current	Output current	Part-No.	Input Voltage	Output Voltage	Output current	Output current
S7U-0505	5V	5V	200mA	400mA	S7U-0505D	5V	± 5V	+/-100mA	+/-200mA
S7U-0512		12V	83mA	166mA	S7U-0512D		±12V	+/- 41mA	+/- 83mA
S7U-0515		15V	66mA	132mA	S7U-0515D		±15V	+/- 33mA	+/- 66mA
S7U-1205	12V	5V	200mA	400mA	S7U-1205D	12V	± 5V	+/-100mA	+/-200mA
S7U-1212		12V	83mA	166mA	S7U-1212D		±12V	+/- 41mA	+/- 83mA
S7U-1215		15V	66mA	132mA	S7U-1215D		±15V	+/- 33mA	+/- 66mA
S7U-1505	15V	5V	200mA	400mA	S7U-1505D	15V	± 5V	+/-100mA	+/-200mA
S7U-1512		12V	83mA	166mA	S7U-1512D		±12V	+/- 41mA	+/- 83mA
S7U-1515		15V	66mA	132mA	S7U-1515D		±15V	+/- 33mA	+/- 66mA
S7U-2405	24V	5V	200mA	400mA	S7U-2405D	24V	± 5V	+/-100mA	+/-200mA
S7U-2412		12V	83mA	166mA	S7U-2412D		±12V	+/- 41mA	+/- 83mA
S7U-2415		15V	66mA	132mA	S7U-2415D		±15V	+/- 33mA	+/- 66mA
S7U-2424		24V	41mA	83mA					

The input voltage can be increased by the value of the selected output voltage in boost operation (see Application Note C43, page 149).



Any other input or output voltages available

PIN CONNECTION			
PIN	SINGLE	SINGLE A	DUAL
1	VCC	VCC	VCC
2	GND	GND	GND
4	NC	-Vout	-Vout
5	-Vout	NP	COM
6	+Vout	+Vout	+Vout

Add "A" to the end of Partnumber.
For example S7U-0505A 1Watt

Add "S" to the end of Partnumber
for short circuit protection.
For example: S7U-0505/S 1W

ALL DIMENSIONS IN MM
Tolerance +/- 0,25mm
All pins on a 2,54mm pitch
NC = No connection, NP = No pin

NOTE: Input and output capacitor
4,7µF - 10µF recommended.
Dot denotes pin 1
2 Watt version less stressable
than 1 Watt Version

Unregulated
Case Style: SIP 7

COMMERCIAL-INDUSTRIAL 1 Watt / 2 Watt DC/DC Converters Series: S7U-xyxyB/H

Electrical specifications:

Input voltage range: $\pm 10\%$
Output voltage accuracy: $\pm 5\%$ **
Line Voltage regulation: $\pm 1,2\%$ / 1% of V_{in} max.
Load Voltage regulation: 5V output type 15% max.
(10% to 100% full load) 9V ~ 24V output types 10% max.
Efficiency: up to 84%

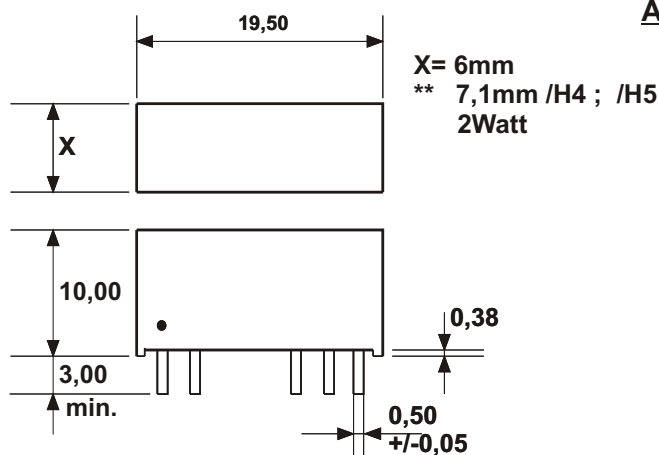
Output Ripple & Noise: max. 100mVp-p (single output)
max. ± 75 mVp-p (dual output)
Short circuit protection: 1,0 second
Optional Part-No. /S: continuous
Operating temperature: -40°C to $+85^{\circ}\text{C}$
Isolation voltage: min. 3000V DC
**Optional Part-No. /H4: 4000V DC
**Optional Part-No. /H5: 5200V DC (1Watt output power)

CAUTION: NO INPUT POLARITY CHANGE ALLOWED!

** Note: Measured @25°C with the condition
of V_{in} = nominal and full load

			1 Watt	2 Watt				1 Watt	2 Watt
Part-No. Single Output	Input Voltage	Output Voltage	Output current	Output current	Part-No. Dual Output	Input Voltage	Output Voltage	Output current	Output current
S7U-0505B/H S7U-0512B/H S7U-0515B/H	5V	5V 12V 15V	200mA 83mA 66mA	400mA 167mA 133mA	S7U-0505DB/H S7U-0512DB/H S7U-0515DB/H	5V	± 5 V ± 12 V ± 15 V	± 100 mA ± 41 mA ± 33 mA	± 200 mA ± 82 mA ± 66 mA
S7U-1205B/H S7U-1212B/H S7U-1215B/H	12V	5V 12V 15V	200mA 83mA 66mA	400mA 167mA 133mA	S7U-1205DB/H S7U-1212DB/H S7U-1215DB/H	12V	± 5 V ± 12 V ± 15 V	± 100 mA ± 41 mA ± 33 mA	± 200 mA ± 82 mA ± 66 mA
S7U-1505B/H S7U-1512B/H S7U-1515B/H	15V	5V 12V 15V	200mA 83mA 66mA	400mA 167mA 133mA	S7U-1505DB/H S7U-1512DB/H S7U-1515DB/H	15V	± 5 V ± 12 V ± 15 V	± 100 mA ± 41 mA ± 33 mA	± 200 mA ± 82 mA ± 66 mA
S7U-2405B/H S7U-2412B/H S7U-2415B/H	24V	5V 12V 15V	200mA 83mA 66mA	400mA 167mA 133mA	S7U-2405DB/H S7U-2412DB/H S7U-2415DB/H	24V	± 5 V ± 12 V ± 15 V	± 100 mA ± 41 mA ± 33 mA	± 200 mA ± 82 mA ± 66 mA

The input voltage can be increased by the value of the selected output voltage in boost operation (see Application Note C43, page 149).



Any other input & output voltage available !

PIN CONNECTION		
PIN	SINGLE	DUAL
1	VCC	VCC
2	GND	GND
3	NP	NP
4	NP	NP
5	-Vout	-Vout
6	NP	COM
7	+Vout	+Vout

ALL DIMENSIONS IN MM
Tolerance $\pm 0,25$ mm
All pins on a 2,54mm pitch
NC = No connection, NP = No pin

NOTE: Input and output capacitor
4,7 μ F - 10 μ F recommended.
Dot denotes pin 1

Specification may be changed without notice
please contact office for verification

We can offer EMC - Filter
according to EN55011/22 Class B.

Unregulated
Case Style: SIP 7

COMMERCIAL-INDUSTRIAL DC/DC Converters Series: S7U-xyxyB/EN

EN-60950

Electrical specifications:

Input voltage range: +/- 10%
Output voltage accuracy: +/- 5%
Line Voltage regulation: +/- 1,2% / 1% of Vin typ.
Load Voltage regulation: 3,3V,5V output types 15% max.
(10% to 100% full load) other output types 10% max.
Efficiency at full Load: up to 80%

Output Ripple & Noise: max. 200mVp-p
Short circuit protection: 1,0 second
*S-Suffix: continuous
Operating temperature: -40°C to +85°C
Isolation voltage: min. 5200V DC
Isolation capacitance: 1,5pF min. / 10pF max.

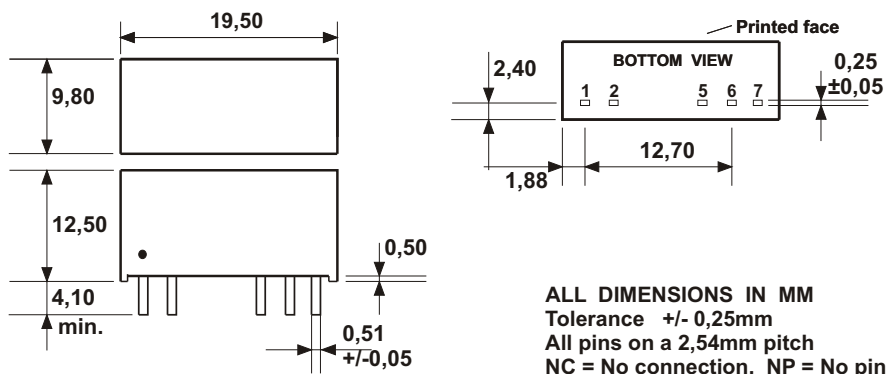
* Add "S" to the end of Partnumber.
For example S7U-0509DBS/EN 2W

CAUTION: NO INPUT POLARITY CHANGE ALLOWED!

			1 Watt	2 Watt				1 Watt	2 Watt
Part-No. Single Output	Input Voltage	Output Voltage	Output current	Output current	Part-No. Dual Output	Input Voltage	Output Voltage	Output current	Output current
S7U-0503,3B/EN S7U-0505B/EN S7U-0509B/EN S7U-0512B/EN S7U-0515B/EN	5V	3,3V 5V 9V 12V 15V	300mA 200mA 111mA 83mA 66mA	600mA 400mA 222mA 167mA 132mA	S7U-0503,3DB/EN S7U-0505DB/EN S7U-0509DB/EN S7U-0512DB/EN S7U-0515DB/EN	5V	+/- 3,3V +/- 5V +/- 9V +/- 12V +/- 15V	+/-150mA +/-100mA +/- 56mA +/- 42mA +/- 33mA	+/-300mA +/-200mA +/-111mA +/- 85mA +/- 66mA
S7U-0903,3B/EN S7U-0905B/EN S7U-0909B/EN S7U-0912B/EN S7U-0915B/EN	9V	3,3V 5V 9V 12V 15V	300mA 200mA 111mA 83mA 66mA	600mA 400mA 222mA 167mA 132mA	S7U-0903,3DB/EN S7U-0905DB/EN S7U-0909DB/EN S7U-0912DB/EN S7U-0915DB/EN	9V	+/- 3,3V +/- 5V +/- 9V +/- 12V +/- 15V	+/-150mA +/-100mA +/- 56mA +/- 42mA +/- 33mA	+/-300mA +/-200mA +/-111mA +/- 85mA +/- 66mA
S7U-1203,3B/EN S7U-1205B/EN S7U-1209B/EN S7U-1212B/EN S7U-1215B/EN	12V	3,3V 5V 9V 12V 15V	300mA 200mA 111mA 83mA 66mA	600mA 400mA 222mA 167mA 132mA	S7U-1203,3DB/EN S7U-1205DB/EN S7U-1209DB/EN S7U-1212DB/EN S7U-1215DB/EN	12V	+/- 3,3V +/- 5V +/- 9V +/- 12V +/- 15V	+/-150mA +/-100mA +/- 56mA +/- 42mA +/- 33mA	+/-300mA +/-200mA +/-111mA +/- 85mA +/- 66mA
S7U-1503,3B/EN S7U-1505B/EN S7U-1509B/EN S7U-1512B/EN S7U-1515B/EN	15V	3,3V 5V 9V 12V 15V	300mA 200mA 111mA 83mA 66mA	600mA 400mA 222mA 167mA 132mA	S7U-1503,3DB/EN S7U-1505DB/EN S7U-1509DB/EN S7U-1512DB/EN S7U-1515DB/EN	15V	+/- 3,3V +/- 5V +/- 9V +/- 12V +/- 15V	+/-150mA +/-100mA +/- 56mA +/- 42mA +/- 33mA	+/-300mA +/-200mA +/-111mA +/- 85mA +/- 66mA
S7U-2403,3B/EN S7U-2405B/EN S7U-2409B/EN S7U-2412B/EN S7U-2415B/EN	24V	3,3V 5V 9V 12V 15V	300mA 200mA 111mA 83mA 66mA	600mA 400mA 222mA 167mA 132mA	S7U-2403,3DB/EN S7U-2405DB/EN S7U-2409DB/EN S7U-2412DB/EN S7U-2415DB/EN	24V	+/- 3,3V +/- 5V +/- 9V +/- 12V +/- 15V	+/-150mA +/-100mA +/- 56mA +/- 42mA +/- 33mA	+/-300mA +/-200mA +/-111mA +/- 85mA +/- 66mA

The input voltage can be increased by the value of the selected output voltage in boost operation (see Application Note C43, page 149).

Any other input & output voltage available !



PIN CONNECTION		
PIN	SINGLE	DUAL
1	VCC	VCC
2	GND	GND
3	NP	NP
4	NP	NP
5	-Vout	-Vout
6	NP	COM
7	+Vout	+Vout

NOTE:
Input and output capacitor
4,7µF - 10µF recommended.
Dot denotes pin 1

Specification may be changed without notice
please contact office for verification

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according to EN55011/22 Class B.

Unregulated
Case Style: SIP 7

COMMERCIAL-INDUSTRIAL DC/DC Converters

Isolated outputs

1 Watt / 2 Watt
Series: S7U

Electrical specifications:

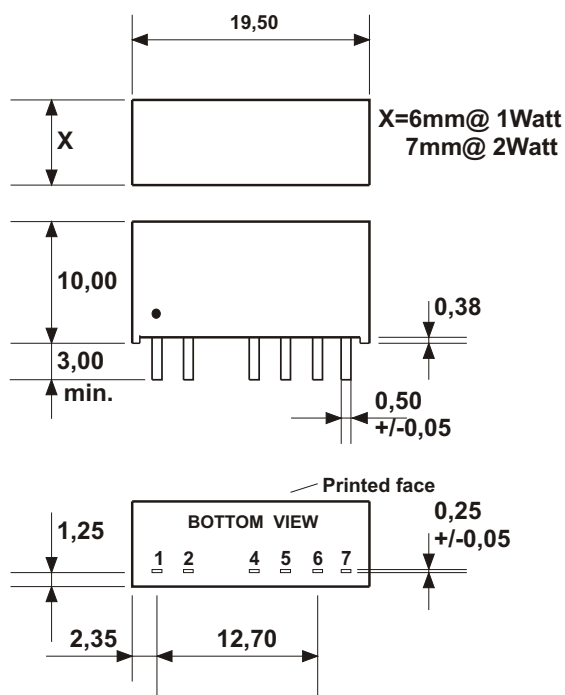
Input voltage range: +/- 10%
Output voltage accuracy: +/- 5% **
Line Voltage regulation: +/- 1,2% / 1% of Vin max.
Load Voltage regulation: 5V output type 15% max.
(10% to 100% full load) 9V ~ 24V output types 10% max.
Efficiency at full load: typ. 80%

Output Ripple & Noise: 1W; max. 75mVp-p
2W; max. 150mVp-p
Short circuit protection: 1,0 second
* S-Suffix: continuous
Operating temperature: -40°C to +85°C
Isolation voltage I/O: min. 1000V DC
Isolation voltage O/O: min. 1000V DC

CAUTION: NO INPUT POLARITY CHANGE ALLOWED!

** Note: Measured @25°C with the condition
of Vin = nominal and full load

Part-No. Dual output	Input Voltage	Output voltage DC	1 Watt	2 Watt
			Output current	Output current
S7U-050505 S7U-051212 S7U-051515	5V	5V / 5V 12V / 12V 15V / 15V	100mA / 100mA 41mA / 41mA 33mA / 33mA	200mA / 200mA 83mA / 83mA 66mA / 66mA
S7U-120505 S7U-121212 S7U-121515	12V	5V / 5V 12V / 12V 15V / 15V	100mA / 100mA 41mA / 41mA 33mA / 33mA	200mA / 200mA 83mA / 83mA 66mA / 66mA
S7U-150505 S7U-151212 S7U-151515	15V	5V / 5V 12V / 12V 15V / 15V	100mA / 100mA 41mA / 41mA 33mA / 33mA	200mA / 200mA 83mA / 83mA 66mA / 66mA
S7U-240505 S7U-241212 S7U-241515	24V	5V / 5V 12V / 12V 15V / 15V	100mA / 100mA 41mA / 41mA 33mA / 33mA	200mA / 200mA 83mA / 83mA 66mA / 66mA



Any other input & output voltage available !

PIN CONNECTION	
PIN	SINGLE
1	VCC
2	GND
3	NP
4	+ OUT 1
5	- OUT 1
6	+ OUT 2
7	- OUT 2

ALL DIMENSIONS IN MM
Tolerance +/- 0,25mm
All pins on a 2,54mm pitch
NC = No connection, NP = No pin

NOTE: Input and output capacitor
4,7µF - 10µF recommended.
Dot denotes pin 1

Specification may be changed without notice
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We can offer EMC - Filter
according to EN55011/22 Class B.