

Unregulated SIL DC/DC Converters

FI-Series 2 Watt



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| <ul style="list-style-type: none"> • DC/DC unregulated converter modules • Industry standard pinning • 1s short circuit proof • 1kVdc isolation voltage • UL 94V-0 package material | <ul style="list-style-type: none"> • DC/DC Wandler unreguliert • Industriestandard pinning • 1s kurzschlussfest • 1kVdc galvanische Trennung • UL 94V-0 Gehäusematerial und Vergussmasse | <ul style="list-style-type: none"> • Convertisseur DC/DC non régulé • Brochage standard industriel • Résistant 1s au court-circuit • Isolation galvanique 1kVdc • Matériaux de boîtier et masse de remplissage conformes UL 94V-0 |
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Product range

Typenübersicht

Sommaire des types

PART NUMBER	PINNING	INPUT VOLTAGE		OUTPUT		EFFICIENCY
		Nominal	Range	Voltage	Current	Typical
FI(xx)-3V3S	SIL-4	5, 9, 12, 15, 24 VDC	±10%	3.3 VDC	606 mA	70%
FI(xx)-05S			±10%	5 VDC	400 mA	75%
FI(xx)-07S			±10%	7 VDC	285 mA	72%
FI(xx)-09S			±10%	9 VDC	222 mA	76%
FI(xx)-12S			±10%	12 VDC	168 mA	78%
FI(xx)-15S			±10%	15 VDC	132 mA	80%
FI(xx)-24S			±10%	24 VDC	83 mA	80%

Ordering Example:

Substitute (xx) for 05, 09, 12, 15 or 24

FI 05 - 3V3 S

Product Series

Nominal Input Voltage

Nominal Output Voltage
(3V3 = 3.3V)

Single Output Voltage

Specifications

Spezifikationen

Spécifications

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

INPUT SPECIFICATIONS

Characteristics		Conditions	min	typ	max	unit
U _{in}	Input voltage	T _A < T _{Amax}	±10			% U _{in nom}
	Input filter		capacitor type			

OUTPUT SPECIFICATIONS

Characteristics		Conditions	min	typ	max	unit
U _{acc}	Output voltage accuracy	of nominal output voltage			±5	% U _{out}
	Line regulation	$U_{in\ delta} = ((U_{in\ nom} - U_{in}) / U_{in\ nom}) \times 100$			±1.2xU _{in delta}	% U _{out}
	Load regulation see "Load Regulation", page 3	10% to 100% load, U _{out} = 3.3Vdc			20	% U _{out}
		10% to 100% load, U _{out} = 5Vdc			15	
		10% to 100% load, U _{out} = 7,9,12,15,24V			10	
U _{rn}	Output ripple & noise				200	mVpp
	Output short circuit characteristic			I _{out} > I _{nom}		
	Output short circuit protection		1			sec

GENERAL SPECIFICATIONS

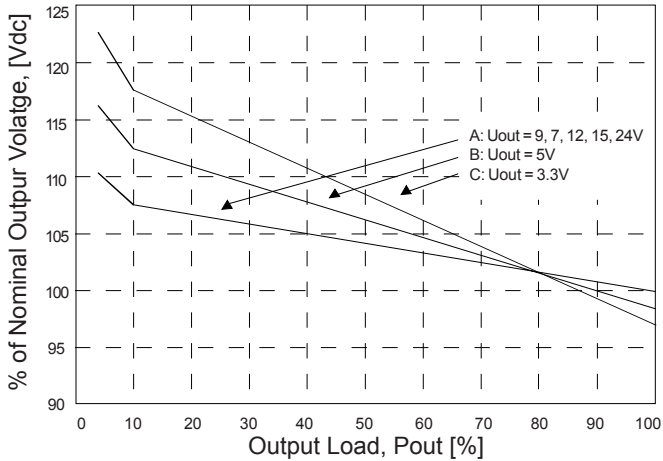
Characteristics		Conditions	min	typ	max	unit
U _{iso}	Isolation voltage	input/output	1'000			Vdc
R _{iso}	Isolation resistance	Input to output		10		GOhm
C _{I/O}	Input / output capacitance	Input to output	30		85	pF
f _s	Switching frequency	Fixed	35		85	kHz
	Case material		Plastic, UL 94V-0			
	Weight	SIL-4 (FO-series)		1.4		g
	Dimensions	LxWxH, see "case" page 3; SIL-4		11.5x7.6x10.2		mm

ENVIRONMENTAL SPECIFICATIONS

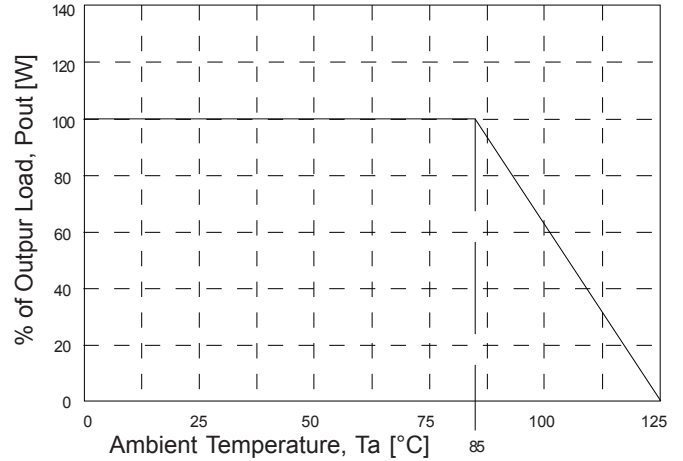
Characteristics		Conditions	min	typ	max	unit
T _A	Operating temperatures	Ambient temperature, see also "Derating" page 3	-40		+85	°C
	Storage temperatures	Ambient temperature	-55		+125	°C

Typical characteristics

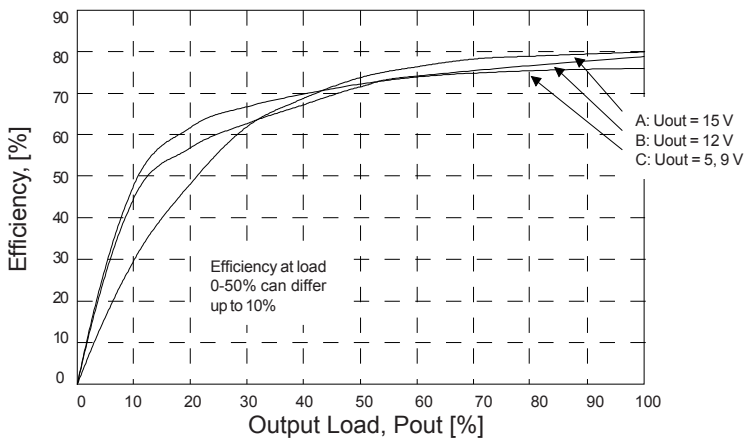
Load Regulation (typical values)



Derating



Efficiency (typical values)



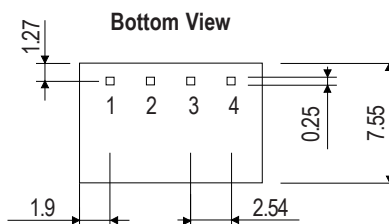
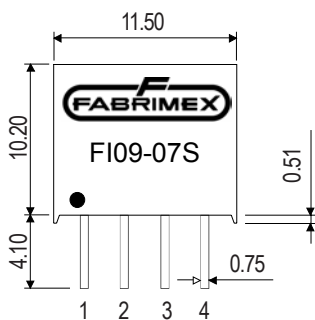
Case

Gehäuse

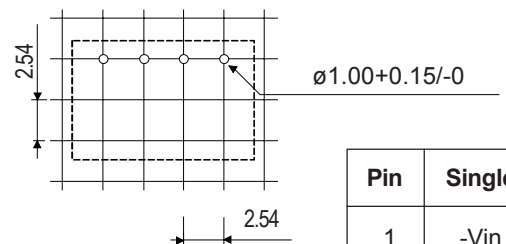
Boîtier

Dimensions in mm. Normal tolerance 1/10 ±0.5 mm, 1/100 ±0.25 mm

Flxx-xxS series; SIL-4:



Recommended Footprint, Bottom View



Pin	Single
1	-Vin
2	+Vin
3	-Vout
4	+Vout

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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