

Unregulated
Case Style: SIP 16

MEDICAL - INDUSTRIAL
DC/DC Converters
for high frequency surgical equipment
REINFORCED INSULATION
single / dual output

Stand: 07/14
1 - 2 Watt
Series:
MED-FS16U

EN 60601-2-2

Electrical specifications:

Input voltage range: $\pm 10\%$
Output voltage accuracy: $\pm 2\%$ (Vin=nominal & full load)
 $\pm 5\%$ (2W series)
Line Vin/Vout: $\pm 1\%$ / $\pm 1\%$
Output voltage change: 3,3V, 5V output types 15% max.
2W 5V input series 15% max.
9V ~ 24V output types 10% max.
Operating temperature: -40°C to $+95^{\circ}\text{C}$
Ambient temperature: -40°C to $+71^{\circ}\text{C}$
for 2W: > 1000mtr. ASL derating required 2,5%/250 mtr.

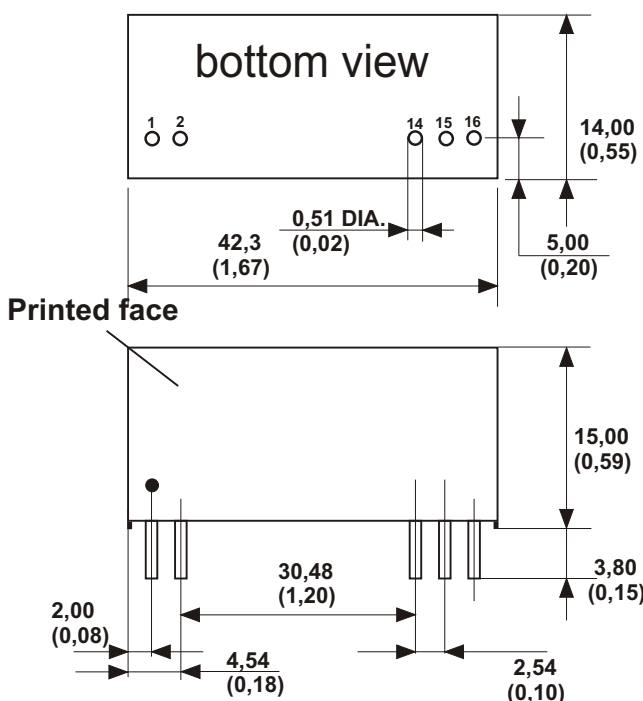
Ripple: typ. 150mVp-p
Temperature coefficient: $\pm 0,02\%$ / $^{\circ}\text{C}$
Insulation test voltage: 10kV AC rms 1min
Insulation voltage: 5kV AC rms continuous
Efficiency: up to 80%
Short circuit protection: continuous
Inrush overload: max. 30%
couple capacitance: $\sim 10\text{pF}$
clearance/creepage: >27mm min.

partial discharge free insulation 5kV AC rms

CAUTION: NO INPUT POLARITY CHANGE ALLOWED!

				1 Watt	2 Watt			1 Watt	2 Watt
Part No.: SINGLE	Input voltage	Output voltage	Output current	Output current	Part No.: DUAL	Input voltage	Output voltage	Output current	Output current
MED-FS16U-0505 MED-FS16U-0512 MED-FS16U-0515	5V DC	5V DC 12V 15V	200mA 83mA 66mA	400mA 166mA 133mA	MED-FS16U-0505D MED-FS16U-0512D MED-FS16U-0515D	5V DC	$\pm 5\text{V DC}$ $\pm 12\text{V}$ $\pm 15\text{V}$	$\pm 100\text{mA}$ $\pm 42\text{mA}$ $\pm 33\text{mA}$	$\pm 200\text{mA}$ $\pm 83\text{mA}$ $\pm 67\text{mA}$
MED-FS16U-1205 MED-FS16U-1212 MED-FS16U-1215	12V DC	5V DC 12V 15V	200mA 83mA 66mA	400mA 166mA 133mA	MED-FS16U-1205D MED-FS16U-1212D MED-FS16U-1215D	12V DC	$\pm 5\text{V DC}$ $\pm 12\text{V}$ $\pm 15\text{V}$	$\pm 100\text{mA}$ $\pm 42\text{mA}$ $\pm 33\text{mA}$	$\pm 200\text{mA}$ $\pm 83\text{mA}$ $\pm 67\text{mA}$
MED-FS16U-1505 MED-FS16U-1512 MED-FS16U-1515	15V DC	5V DC 12V 15V	200mA 83mA 66mA	400mA 166mA 133mA	MED-FS16U-1505D MED-FS16U-1512D MED-FS16U-1515D	15V DC	$\pm 5\text{V DC}$ $\pm 12\text{V}$ $\pm 15\text{V}$	$\pm 100\text{mA}$ $\pm 42\text{mA}$ $\pm 33\text{mA}$	$\pm 200\text{mA}$ $\pm 83\text{mA}$ $\pm 67\text{mA}$
MED-FS16U-2405 MED-FS16U-2412 MED-FS16U-2415	24V DC	5V DC 12V 15V	200mA 83mA 66mA	400mA 166mA 133mA	MED-FS16U-2405D MED-FS16U-2412D MED-FS16U-2415D	24V DC	$\pm 5\text{V DC}$ $\pm 12\text{V}$ $\pm 15\text{V}$	$\pm 100\text{mA}$ $\pm 42\text{mA}$ $\pm 33\text{mA}$	$\pm 200\text{mA}$ $\pm 83\text{mA}$ $\pm 67\text{mA}$

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 voltages available
(for example 3,3V)

PIN CONNECTION		
PIN	single	dual
1	+ IN	+ IN
2	- IN	- IN
3 - 13	NP	NP
14	+ Vout	+ Vout
15	NC	- Vout
16	- Vout	COM

Input capacitor 6,8 - 10 μF is a must.

ALL DIMENSIONS IN MM (INCHES)
MILLIMETERS $\pm 0,50\text{mm}$
(INCHES $\pm 0,02"$)
All pins on a 2,54mm pitch
Note: NC = No connection; NP = No pin
Dot denote pin 1

All specifications typical @ $T_a +25^{\circ}\text{C}$
Nom. Vin & full load, unless otherwise specified!

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

Specification may be changed without notice
please contact office for verification