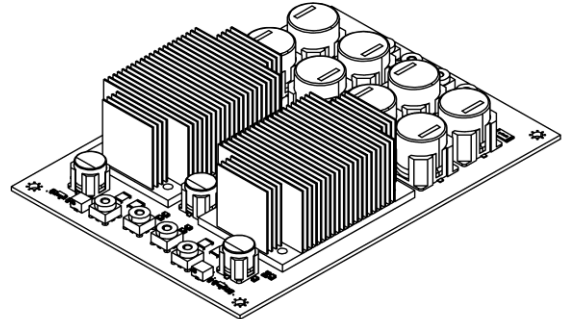


**OSA ELECTRONICS DDCX02 ULTRA LOW NOISE NON-ISOLATED DC/DC CONVERTERS**

**Features**

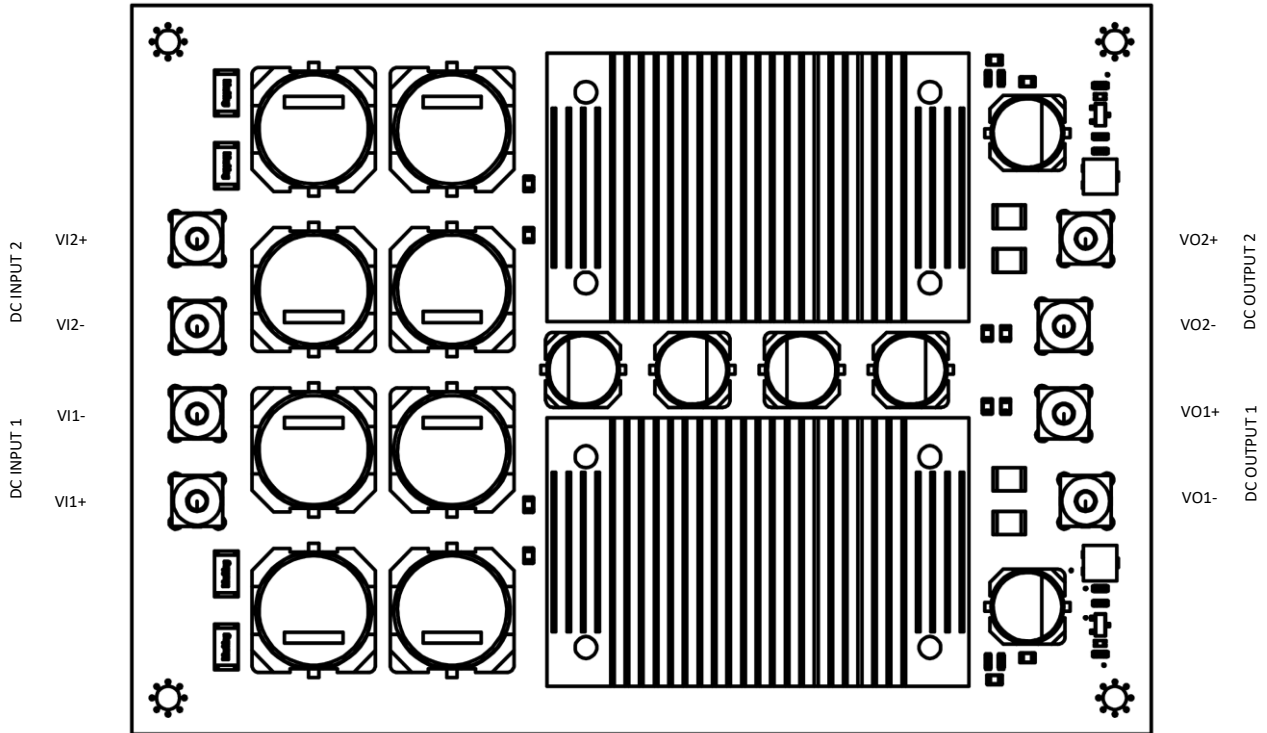
- Ultra-low Noise Output Ripple and High PSRR
- Industrial, Medical and Military models
- Dual +/- Outputs (Series or Parallel)
- Ultra-low dropout voltage
- Inrush current limiting
- RC and LC Input and Output Filtering
- Custom Voltage and fine adjust by request



Specifications		DDC402BE	DDC402MP	DDC802BE	DDC802MP
Model		DDC402BE	DDC402MP	DDC802BE	DDC802MP
DC Input	V <sub>DC</sub>	1.8 to 20V (3.6 to 40V in series)			
DC Output	V <sub>DC</sub>	0 to 15V (0 to 30V in series)			
I <sub>out</sub> Max (per ch.)	A	4A		8A	
Output Type	-	Dual Output			
Output Adjustment	%	None / ±10%			
Output Indicator	-	White LED = ON (PGOOD Signal)			
Line Regulation	%	≤0.03%			
Load Regulation	%	≤0.01%			
RMS Noise (10Hz to 10kHz)	V <sub>RMS</sub>	≤ 0.0000004 V <sub>RMS</sub> (0.4 μV <sub>RMS</sub> )		≤ 0.0000015 V <sub>RMS</sub> (0.15 μV <sub>RMS</sub> )	
PP Noise (10Hz to 100kHz)	V <sub>pp</sub>	≤ 0.000005 V <sub>pp</sub> (0.005 mV <sub>pp</sub> )		≤ 0.000002 V <sub>pp</sub> (0.002 mV <sub>pp</sub> )	
PSRR at 1MHz	dB	80dB		82dB	
Overcurrent Protection	%	105 to 110%		105 to 110%	
Overvoltage Protection	%	10%			
Cooling	-	Convection			
Operating Temp. Range	°C	-40 to +125°C	-55 to +150°C	-40 to +125°C	-55 to +150°C
Storage Temperature	°C	-50 to +135°C	-65 to +165°C	-50 to +135°C	-65 to +165°C
Temperature coefficient	%	±0.01% per °C			
Humidity (non condensing)	%RH	Operating: 10 - 95% RH			
Vibration	-	10-55Hz Amplitude (sweep for 1 min), <2G X, Y, Z 1 hour each			
Shock	-	<20G			
Withstand Voltage	-	Input to Output: 4kVAC, Input to Chassis: 2.5kVAC for 1 minute			
Isolation Resistance	-	>100M at 500VDC @ 25C & 70%RH for 1 minute			
Weight	g	250g		360g	
Size WxHxD	mm	140 x 100 x 30 mm		140 x 100 x 30 mm	
Warranty	yrs	Two years			



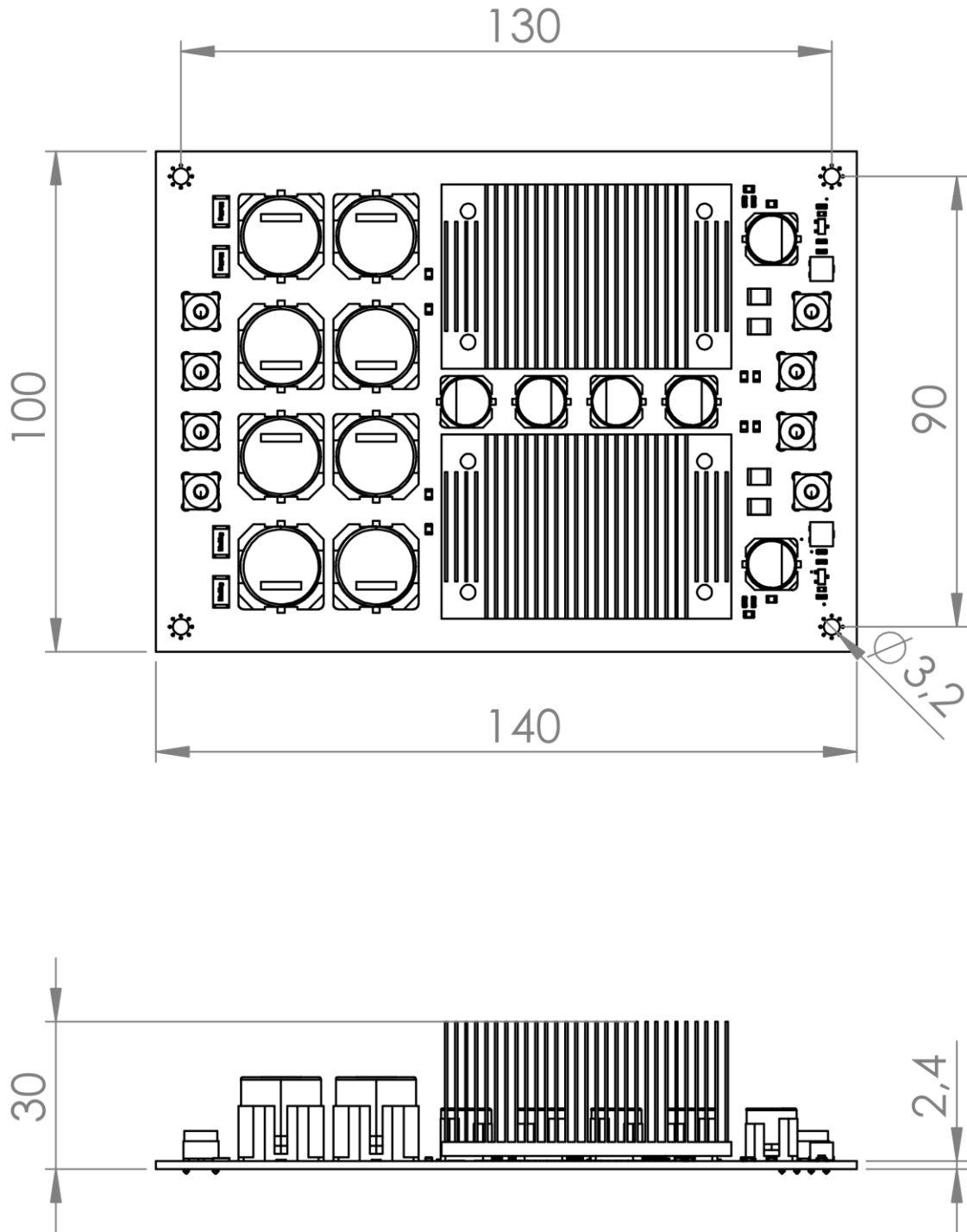
## Wiring Diagram



- Recommended terminals: TE Connectivity 165295
- Recommended wire: 18AWG CNC TECH 3099-18-1-0500-001-1-TS
- Recommended screws: M3 x4mm Pan Head

**Drawing**

- DDC402XX Series



\*All dimensions in mm