



### **Outline Product Specification**



- ☐ High Reliability & Small Size
- ☐ Three Outputs
- □ Output Over Current & Short Circuit
  Protection
- Input to Output Isolated
- Metal-Sealed, Suitable for PCB Mount



The PXI19200N12T-11M(A) Series high voltage DC-DC converter is a kind of power supply module with small package and high reliability.

The output voltages are separately -200V<sub>DC</sub> and  $\pm 12V_{DC}$ , and the output power is 11W. The conductive interference is reduced by Built-in LC filters. Internal high capacitance ceramic capacitors in the output loop can suppress the output voltage ripple effectively.

The typical input voltage is  $19V_{DC}$ , and the input voltage ranges from  $16.5V_{DC}$  to  $22V_{DC}$ .  $29V_{DC}$ .

#### **ABSOLUTE MAXIMUM RATINGS**

Over

Current

Protection

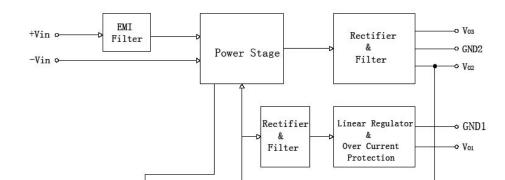
BLOCK DIAGRAM

Input Voltage:  $16.5V_{DC}$  to  $+22V_{DC}$ 

Pin-Solder Temp (10s): 300°C Storage Temp: -55°C to +85°C

Output Current  $I_{01}$ :  $I_{02} = I_{03}$  5mA;400mA

Operating Temp (Ambient): -40°C to +55°C



PWM

Control

Isolated

Sampling





## THE MAIN CHARACTERISTICS

	Min		Тур		Max		Units
Input Voltage	16.5		19		22		٧
Efficiency (Full Load)	74		(35)		-		%
Output Characteristics							
	-200V			±12V			
	Min	Тур	Max	Min	Тур	Max	Units
Output Current	-	5. 0	F-2	-	400.0	12	mA
Output Voltage Accuracy	-195	-200	-210	±11.88	±12.00	±12.12	Vout
Load Regulation	=	3	F-2	-	0. 2	0. 5	%
Line Regulation	-	3	12	2	0. 2	0. 5	%
Ripple Voltage V <sub>RMS</sub> (20MHz) <sup>①</sup>	-	30	-	=	10	82	mV
Start-up Delay		35	12	_	35	82	ms

#### NOTE:

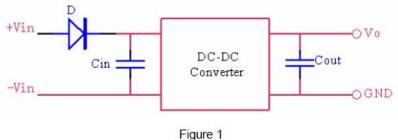
# APPLICATION NOTE

### **Ripple Voltage Suppress**

When the output voltage ripple can't be satisfied in your applications, it can still be suppressed by adding capacitors between the output Vo+ and Vo- pins. Insure that the rated voltage of the capacitors is higher than the output voltage of the converters. And large capacitance can be accomplished with several capacitors in parallel.

### **Reverse Polarity Protection:**

Reverse Polarity Protection is easily achieved by placing a diode in series with the input to the converter. (Figure 1)



\*\*\*LONG TIME SHORT CIRCUIT WORK IS PROHIBITED\*\*\*

<sup>1.</sup> Using tip and barrel measurement.

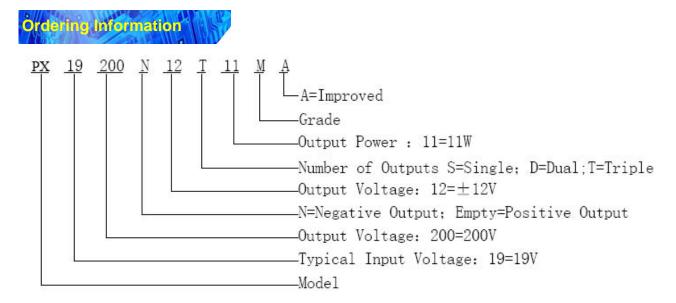




# APPLICATION NOTE cont.

### **Over Current & Short Circuit Protection**

PX19200N12T-11M(A) Series high voltage DC/DC converter has the function of Over Current & Short Circuit Protection. When the converter is under either condition, it will be automatically in Current Protection mode. When the condition is removed, the converter will be automatically restored.



## MECHANICAL SPECIFCATIONS

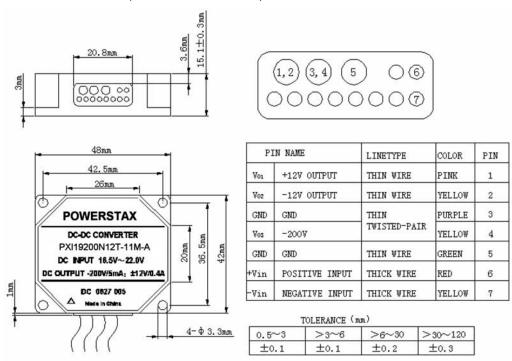
Mechanical Characteristics				Unit		
Piza/L V M V D)	PXI19200N12T-11M	48×42×16.6				
Size(L×W×D)	PXI19200N12T-11M-A	48×42×15.1		mm		
Isolation Characteristics						
Isolation(Min)	P	Units				
Insulation Resistance		≥200				
Environmental Screening						
High-Temp						
Low-Temp	-40°C					
Temp-Cycle		-55°C∼+70°C	3 Cycle			
Stabilization Bake		+125℃	24h			
Burn-in		+55°C ( Full Load)	96h			
Environmental						
Resist Over- Load	The Axes:100g, 8ms;	The Radial:30g, 11ms				
Scan Shock	For detailed information, refer to factory's test report.					

### **Outline Specification**

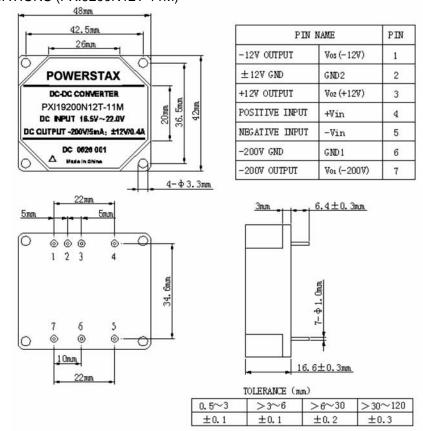




### MECHANICAL SPECIFICATIONS (PXI9200N12T-11M-A)



### MECHANICAL SPECIFICATIONS (PXI9200N12T-11M)



NOTE:  $\triangle$  indicates Pin 1.



Exceeding absolute maximum ratings may cause permanent damage and may reduce reliability. Information and specifications contained in this data sheet are believed to be correct at the time of publication. However, Powerstax accept no responsibility for consequences arising from printing errors or inaccuracies. Specifications are subject to change without notice.