



# American Power Design, Inc.

"The best high voltage design solution"

## X5 SERIES 5 WATT HIGH VOLTAGE DC/DC CONVERTERS



## FEATURES

### \* Customer Selects Output Voltages

- \* Ultra-Wide Input Ranges  
(9-36 Vdc, 20-60 Vdc, 36-72 Vdc)
- \* Efficiency 83% (typ.)
- \* Independently Isolated Outputs
- \* Six-Sided Shielded Case
- \* Remote On/Off Control
- \* 120 kHz Switching Frequency

The X5 Series of DC/DC converters accepts ultra-wide input ranges of 9-36 Vdc, 20-60 Vdc, & 36-72 Vdc. Outputs are independently isolated to 1000Vdc. All models will tolerate a short circuit indefinitely. Also included is a Pi input filter and remote on/off.

## ELECTRICAL SPECIFICATIONS

Voltage Accuracy .....	+/- 1%	Short Circuit Protection .....	Input Current Foldback
	<i>Output 2: +/- 2%</i>	Input Filter .....	Pi Network
Input Regulation .....	+/- 0.1%	Efficiency .....	83% (typ.)
	<i>Output 2: +/- 2%</i>	Switching Frequency .....	120 kHz
Load Regulation .....	+/- 0.2%	Isolation (Input-Output(1)-Output(2)-Case).....	1Kvdc
	<i>Output 2: +/- 2%</i>		
Output Ripple .....	+/- 0.3%		

\* 20-60 Vdc add suffix /B  
\* 36-72 Vdc add suffix /C

## GENERAL SPECIFICATIONS

Temp. Stability.....	+/- 0.02%/°C	Logic Shutdown.....	Logic 0 (on)
Temp. (Operating,Case) .....	-45 to +85°C	EMI/RFI .....	Six-Sided Shield
Temp. (Storage) .....	-55 to +100°C	Temp. Derating .....	None
		Cooling .....	Free-Air Convection

\* All models designed to meet UL 60950  
\* For RoHS Compliant part, add suffix /Y

## PHYSICAL SPECIFICATIONS

Dimensions .....	2.0 x 2.0 x 0.5 inches	Case Material .....	Nickel Plated Copper (With Non-Conductive Base Plate)
Weight .....	2.8 Oz		



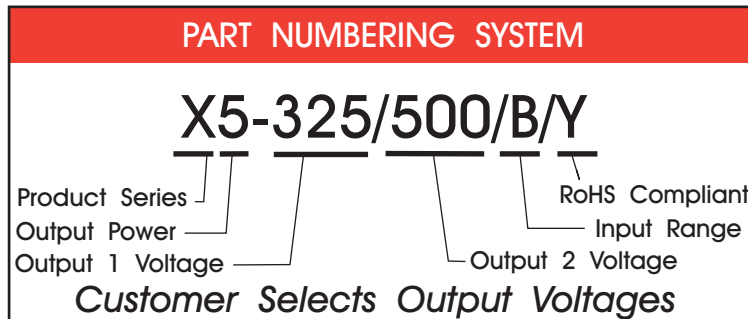
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REPRESENTATIVE MODEL LISTING						
MODEL NUMBER	INPUT SPECIFICATIONS		OUTPUT SPECIFICATIONS			
	VOLTAGE	CURRENT	OUTPUT #1		OUTPUT #2	
			VOLTAGE	CURRENT	VOLTAGE	CURRENT
X5-50	9V - 36V	.66A - .16A	50V	100ma	-	-
X5-50/50	9V - 36V	.66A - .16A	50V	50ma	50v	50ma
X5-75	9V - 36V	.66A - .16A	75V	66ma	-	-
X5-75/75	9V - 36V	.66A - .16A	75V	33ma	75v	33ma
X5-100	9V - 36V	.66A - .16A	100V	50ma	-	-
X5-100/100	9V - 36V	.66A - .16A	100V	25ma	100v	25ma
X5-150	9V - 36V	.66A - .16A	150V	33ma	-	-
X5-150/150	9V - 36V	.66A - .16A	150V	16ma	150v	16ma
X5-200	9V - 36V	.66A - .16A	200V	25ma	-	-
X5-200/200	9V - 36V	.66A - .16A	200V	12ma	200v	12ma
X5-300	9V - 36V	.66A - .16A	300V	16ma	-	-
X5-300/300	9V - 36V	.66A - .16A	300V	8ma	300v	8ma
X5-400	9V - 36V	.66A - .16A	400V	12ma	-	-
X5-400/400	9V - 36V	.66A - .16A	400V	6ma	400v	6ma
X5-500	9V - 36V	.66A - .16A	500V	10ma	-	-
X5-500/500	9V - 36V	.66A - .16A	500V	5ma	500v	5ma

- \* 20-60 Vdc input add suffix /B
- \* 36-72 Vdc input add suffix /C
- \* RoHS Compliant add suffix /Y

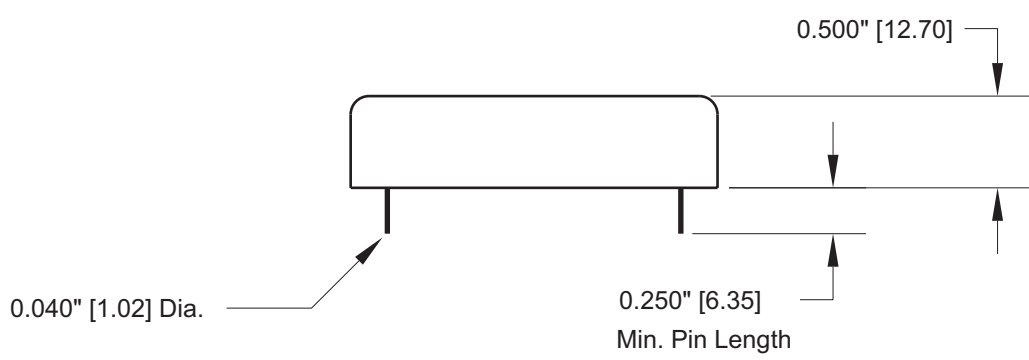
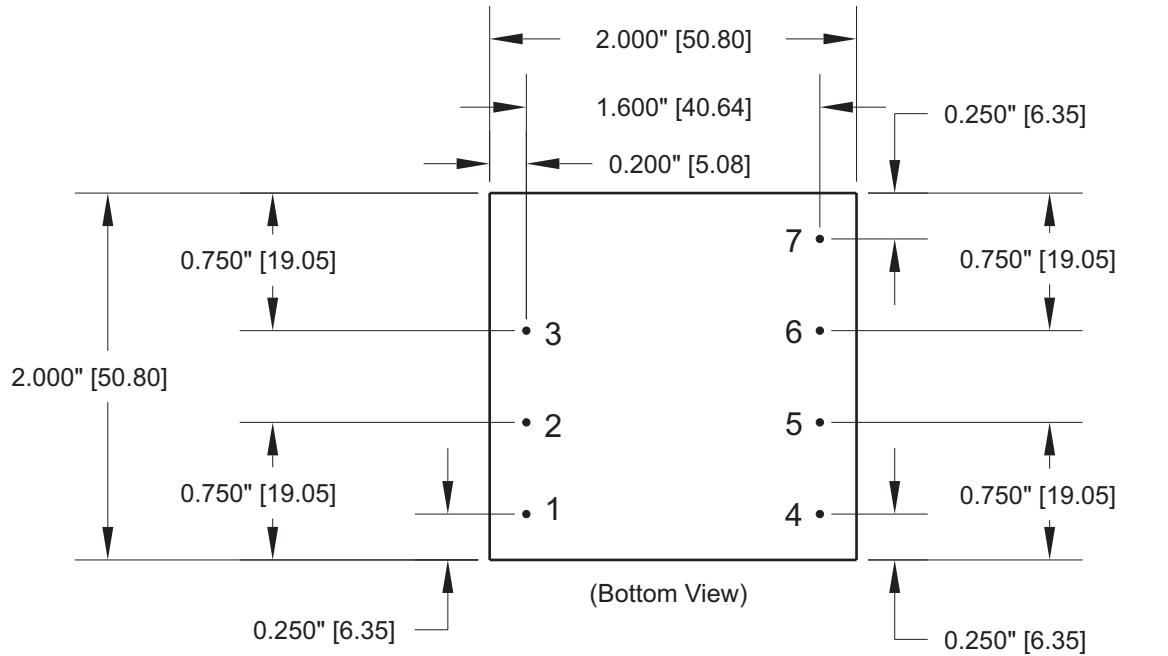




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Pin #	Single	Dual
1	- INPUT	- INPUT
2	On/Off	On/Off
3	+ INPUT	+ INPUT
4	No Pin	OUTPUT 2 +
5	No Pin	OUTPUT 2 -
6	OUTPUT 1 -	OUTPUT 1 -
7	OUTPUT 1 +	OUTPUT 1 +

*Dimensions are in Inches  
[Metric equivalents in brackets]*