



# American Power Design, Inc.

"The best high voltage design solution"

## S20 SERIES 20 WATT HIGH VOLTAGE DC/DC CONVERTERS



### FEATURES

- \* Customer Selects Output Voltage
- \* Outputs to 1000 Vdc
- \* High Power Density
- \* Single and Dual Outputs
- \* Ultra Wide Input Ranges
- \* 1000 Vdc Output Isolation
- \* Continuous Short Circuit Protection
- \* Economical

The S20 Series low profile high voltage DC/DC converter offers a 1000 Vdc isolated single or dual high voltage output in a six-sided copper case. Their high power density, wide input, and excellent regulation make them ideally suited for applications that demand a high degree of performance. All models will tolerate a short circuit indefinitely.

### ELECTRICAL SPECIFICATIONS

Voltage Accuracy .....	+/-5%	Input Filter .....	Low ESR Capacitor
Line Regulation .....	+/- 1%	Efficiency .....	83% (typ.)
Load Regulation .....	+/- 3% (20% to full load)	Short Circuit Protection .....	Continuous
Output Ripple .....	< 0.5%	Switching Frequency .....	120 kHz
		Isolation .....	1000 Vdc

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

### GENERAL SPECIFICATIONS

Temp. Stability .....	+/-0.02%/°C	EMI/RFI.....	Six Sided Shield
Temp. (Operating , Case) .....	-25 to +70°C	Derating .....	None
Temp. (Storage) .....	-40 to +125°C	Cooling .....	Free-Air Convection

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

### PHYSICAL SPECIFICATIONS

Dimensions .....	2 x 2 x 0.50 inches	Case Material .....	Nickel Plated Copper (With Non-Conductive Base Plate)
Weight .....	2.6 Oz		



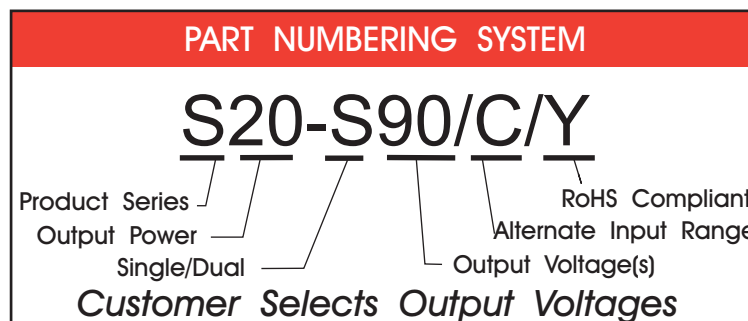
# American Power Design, Inc.

"The best high voltage design solution"

## S20 SERIES 20 WATT HIGH VOLTAGE DC/DC CONVERTERS

REPRESENTATIVE MODEL LISTING								
OUTPUT SPECIFICATIONS			MODEL NUMBER					
VOLTAGE	CURRENT		INPUT 9V - 36Vdc		INPUT 20V - 60Vdc		INPUT 36V - 72Vdc	
	Single	Dual	Single	Dual	Single	Dual	Single	Dual
24Vdc	833mA	416mA	S20-S24	S20-D24	S20-S24/B	S20-D24/B	S20-S24/C	S20-D24/C
48Vdc	416mA	218mA	S20-S48	S20-D48	S20-S48/B	S20-D48/B	S20-S48/C	S20-D48/C
100Vdc	200mA	100mA	S20-S100	S20-D100	S20-S100/B	S20-D100/B	S20-S100/C	S20-D100/C
150Vdc	133mA	66mA	S20-S150	S20-D150	S20-S150/B	S20-D150/B	S20-S150/C	S20-D150/C
200Vdc	100mA	50mA	S20-S200	S20-D200	S20-S200/B	S20-D200/B	S20-S200/C	S20-D200/C
300Vdc	64mA	32mA	S20-S300	S20-D300	S20-S300/B	S20-D300/B	S20-S300/C	S20-D300/C
400Vdc	48mA	24mA	S20-S400	S20-D400	S20-S400/B	S20-D400/B	S20-S400/C	S20-D400/C
500Vdc	40mA	20mA	S20-S500	S20-D500	S20-S500/B	S20-D500/B	S20-S500/C	S20-D500/C
1000Vdc	20mA	N/A	S20-S1000	N/A	S20-S1000/B	N/A	S20-S1000/C	N/A

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

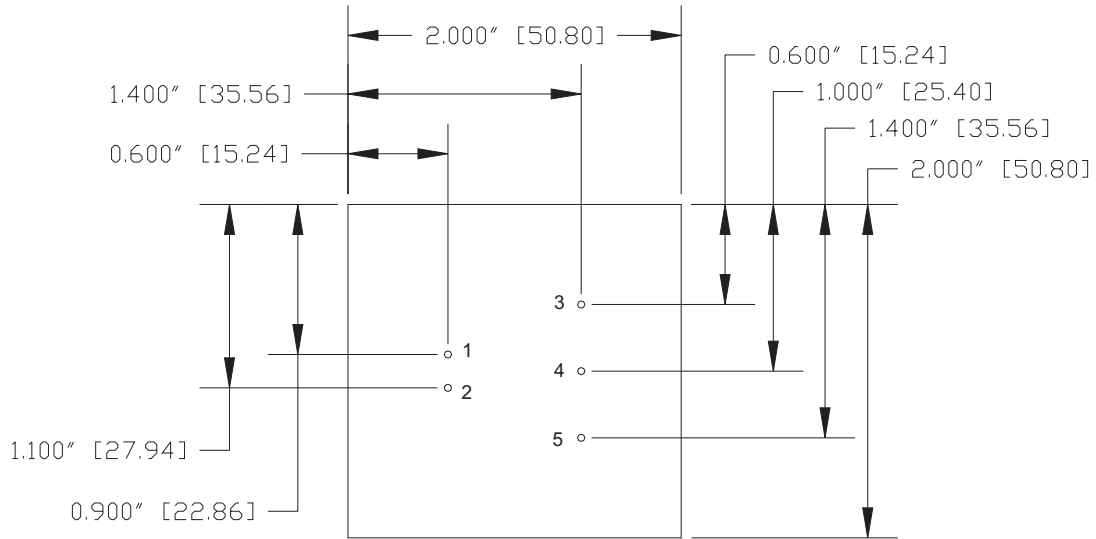




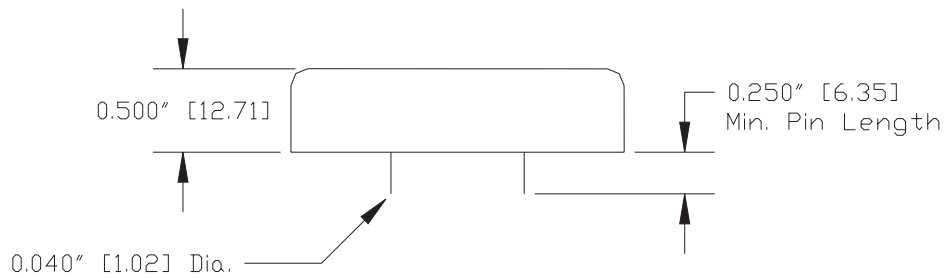
# American Power Design, Inc.

*"The best high voltage design solution"*

## S20 SERIES 20 WATT HIGH VOLTAGE DC/DC CONVERTERS



(Bottom View)



Pin #	Single	Dual
1	+ INPUT	+ INPUT
2	- INPUT	- INPUT
3	+ OUTPUT	+ OUTPUT
4	No Pin	COM
5	- OUTPUT	- OUTPUT

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