

# SERIES VV



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### 1,000 TO 5,000 VDC OUTPUT

### Isolated, Single Output Modules

**1,000 to 5,000 Volts DC Output  
Positive or Negative VDC Output  
Proportional to Input VDC  
Up to 10 Watts  
High Efficiency**

[Go To VV Series 6,000 to 10,000 VDC Output \[1\]](#)

**Output Voltages can be Positive or Negative  
Low Profile 0.500" Height  
For Special Voltages or Military Upgrades Consult Factory 800-431-1064**

This series of "High Voltage" DC-DC Converters are designed to allow you to vary the input voltage in order to vary the output voltage. The seven standard input voltage ranges will allow you to operate these units as fully isolated or with common ground as either positive or negative DC outputs from 1,000 to 5,000 VDC from almost any DC source. These single output, isolated units will operate over the temperature range of -25° C to +70° C with no heat sink or electrical derating required.

#### FEATURES

- Up to 10 watts @ 70° C ambient
- Encapsulated semiconductors conservatively rated for maximum reliability
- Ultra-miniature size 0.500" height
- 7 input voltages standard
- 35 models standard
- High Efficiency: Up to 85%

#### • TYPICAL CHARACTERISTICS:

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**Test Conditions: 25° C  
Operating Temperature Range: -25° C to +70° C  
Storage Temperature: -55° C to +125° C  
Operating Frequency: 15-25 KHz  
Output Temperature Coefficient: 0.02%/°C**

#### OPTIONS AVAILABLE

- Per Mil. Std. 883
- Expanded operating temp. (-40° C to +85° C)
- Stabilization Bake (125° C ambient)
- Temperature Cycle (-55° C to +125° C)
- Hi Temp, burn in

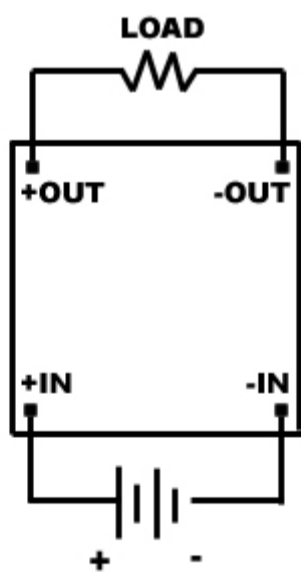
PICO Part Number	Input Voltage Range (VDC)		* Maximum Load Current (mA) Minimum Load Current 5%	Output Voltage Range (VDC)		Max. Output Power (Watts)	Typical Efficiency @ Full Load at Max VIN (%)	Typical Output Voltage Ripple @ Full Load (%)	Price (US \$)
	Min	Max		Min VIN	Max VIN				
5VV1	2.0	5	6.000	100	1000	6	76	2	124.68
5VV2	2.0	5	3.000	250	2000	6	76	2	137.27
5VV3	2.0	5	2.000	300	3000	6	76	2	149.87
5VV4	2.0	5	1.375	550	4000	5.5	78	2	162.46
5VV5	2.0	5	1.100	850	5000	5.5	78	2	175.06

9VV1	3.5	9	7.000	75	1000	7	82	2	124.68
9VV2	3.5	9	3.500	200	2000	7	82	2	137.27
9VV3	3.5	9	2.333	400	3000	7	78	2	149.87
9VV4	3.5	9	1.750	625	4000	7	82	2	162.46
9VV5	3.5	9	1.200	1075	5000	6	82	2	175.06
12VV1	4.0	12	8.000	100	1000	8	82	2	124.68
12VV2	4.0	12	4.000	175	2000	8	82	2	137.27
12VV3	4.0	12	2.667	350	3000	8	82	2	149.87
12VV4	4.0	12	1.750	525	4000	7	83	2	162.46
12VV5	4.0	12	1.200	1050	5000	6	83	2	175.06
15VV1	5.0	15	8.500	75	1000	8.5	83	2	124.68
15VV2	5.0	15	4.250	200	2000	8.5	83	2	137.27
15VV3	5.0	15	2.667	400	3000	8	83	2	149.87
15VV4	5.0	15	1.750	600	4000	7	81	2	162.46
15VV5	5.0	15	1.200	1050	5000	6	81	2	175.06
24VV1	7.0	24	9.000	75	1000	9	84	2	124.68
24VV2	7.0	24	4.500	175	2000	9	84	2	137.27
24VV3	7.0	24	3.000	200	3000	9	82	2	149.87
24VV4	7.0	24	2.000	400	4000	8	82	2	162.46
24VV5	7.0	24	1.200	1075	5000	6	82	2	175.06
28VV1	8.0	28	10.000	75	1000	10	83	2	124.68
28VV2	8.0	28	5.000	175	2000	10	83	2	137.27
28VV3	8.0	28	3.333	250	3000	10	83	2	149.87
28VV4	8.0	28	2.000	375	4000	8	82	2	162.46
28VV5	8.0	28	1.200	1100	5000	6	82	2	175.06
48VV1	15.0	48	8.000	75	1000	8	80	2	124.68
48VV2	15.0	48	4.000	200	2000	8	80	2	137.27
48VV3	15.0	48	2.667	450	3000	8	80	2	149.87
48VV4	15.0	48	2.000	400	4000	8	80	2	162.46
48VV5	15.0	48	1.200	1075	5000	6	80	2	175.06

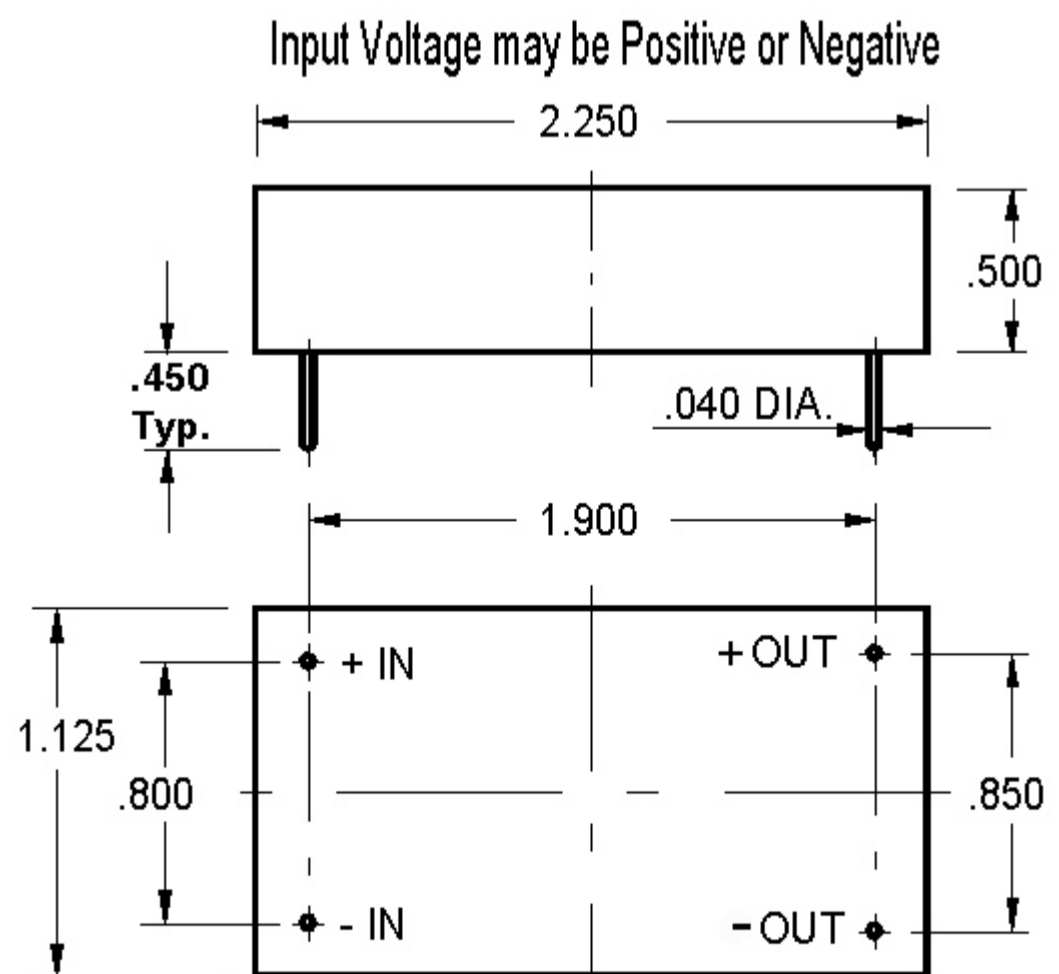
\* Maximum load current remains constant throughout input voltage range.

**Safety Note:** The high voltage power supplies described in this datasheet generate voltages which can be lethal. They should only be installed and used by personnel who have received the appropriate training and who are fully aware of the hazards that exist.

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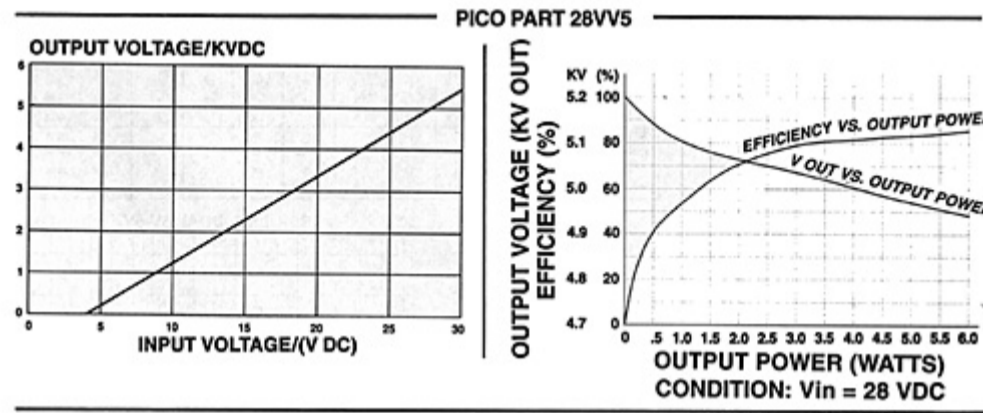
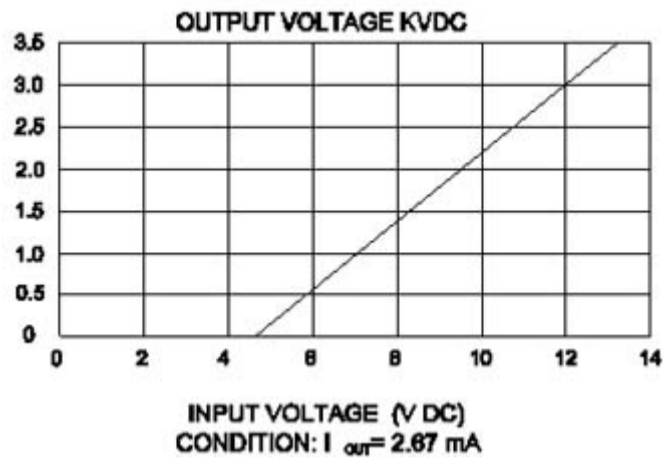


BOTTOM VIEW



BOTTOM VIEW

Measurements in Inches  
Typical Weight: 45 grams




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For immediate engineering assistance or to place an order:

**Call Toll Free: 800-431-1064**

**PICO Electronics, Inc.**

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Tel: 914-738-1400 or Fax: 914-738-8225

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