Series 10AC

Regulated 10 Watt AC-DC Switchers

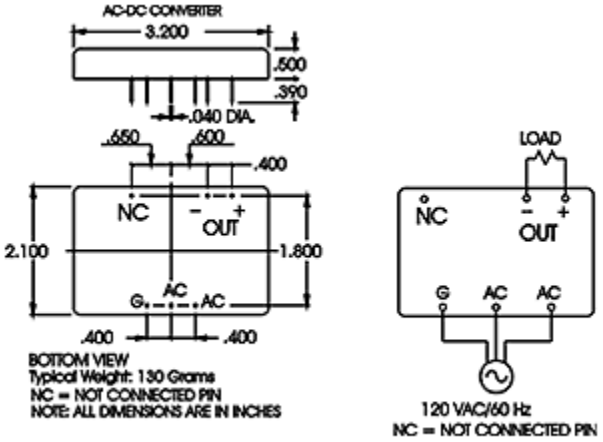
Hi Reliability Hi Efficiency/Isolated Single, Dual, and Triple Outputs

Typical Characteristics
Test Conditions: 25° C ambient
Input Voltage: 90-130 VAC (47-440 Hz)
Line/Load Regulation: See specifications below
Converter Frequency: 25-35 KHz typ
Operating Temperature: -25° C to +70° C ambient
Output Voltage Temperature Coefficient: 0.02% / ° C
Storage Temperature: -55° C. to +125° C
Isolation: 1200 VRMS
Short Circuit Protection: Continuous
This series of low profile 10 Watt AC to DC switchers come in 11 different models. These units offer high efficiency and precise regulation throughout the operating temperature range of -25° C to +70° C ambient, with no heat sink or electrical heating required. The 10AC Series keeps a maximum of 0.500" height while still offering you 1200 volts RMS isolation in a rugged encapsulated case. The convenience of PC mounting and the availability of three outputs should aid your circuit design.

Features
• Low profile 0.500"
• Low weight
• Encapsulated semiconductors, conservatively rated for maximum reliability
• Excellent voltage regulation
• Excellent load regulation
• Up to 10 watts output power at 70° C ambient
• Low output ripple
• Isolation: 1200V RMS
• Single, dual and triple outputs
• No heat sink required
• Miniature size
• No output capacitor required
• Shielding

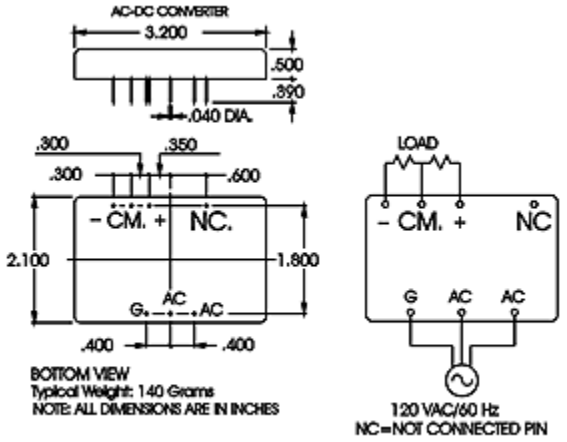
Low Capacity Option: All units can be manufactured with isolation capacity of 50pF. Contact factory.

Series 10AC
Single Output



[Larger Size Drawing And Schematic]

Series 10AC
Dual Output



[Larger Size Drawing And Schematic]

Series 10AC Single Output
Input Voltage 90-130VAC (47-440Hz)
(Optional 170-240VAC, 47-440 Hz)***

Pico Part No.	Output Voltage (VDC)	Max. Load Current (mA)	Max. Output Power (watts)	EFF @ Full Load Typical (%)*	Output Voltage Ripple @ Full Ld. 1-1 MHz BW mv p-p	Output Voltage Tolerance (± %)*	V LD. Reg. 10%-100% Load ** (± %)*	Line Regulation (± %)*	Price (US $)
10AC5S	5	2000	10	75	50	0.5	0.5	0.2	280.69
10AC12S	12	833	10	77	50	0.5	0.5	0.2	280.69

10AC15	15	666	10	79	50	0.5	0.5	0.2	280.69
10AC24S	24	416	10	80	50	0.5	0.5	0.2	280.69

*Readings Taken at 115VAC-60Hz. at full load
**10% minimum load required
*** All units available with 170-240VAC input. Add H prefix to part number - $40 per unit cost added.

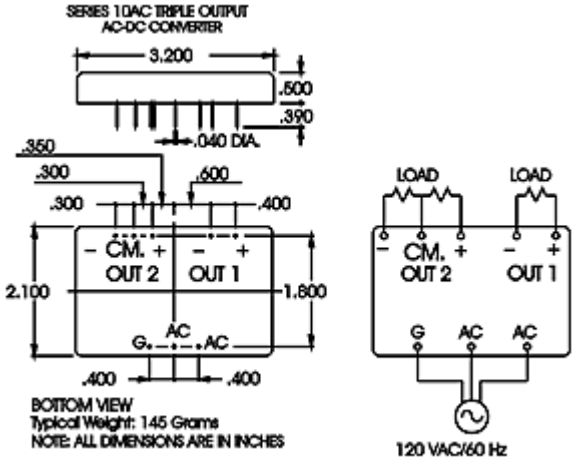
Series 10AC Dual Output
Input Voltage 90-130VAC (47-440Hz)
(Optional 170-240VAC, 47-440 Hz)***

Pico Part No.	Output Voltage (VDC)	Max. Load Current (mA) per output	Max. Output Power (watts) per output	EFF @ Full Load Typical (%)*	Output Voltage Ripple @ Full Ld. 1-1 MHz BW mv p-p	Output Voltage Tolerance (± %)*	V LD. Reg. 10%-100% Load ** (± %)*	Line Regulation (± %)*	Price (US $)
10AC5D	± 5	1000	5	75	50	0.5	0.5	0.2	315.96
10AC12D	± 12	417	5	77	50	0.5	0.5	0.2	315.96
10AC15D	± 15	333	5	80	50	0.5	0.5	0.2	315.96

*Readings Taken at 115VAC-60Hz. at full load each output
**10% minimum load required
*** All units available with 170-240VAC input. Add H prefix to part number - $40 per unit cost added.

Call Factory for Options Available per MIL-STD-883:

- Expanded operating temperature (-55° C to +85° C)
- Stabilization Bake: (125° C ambient)
- Temperature Cycle: -55° C. to +125° C
- Hi Temp, Burn in



Larger Size Drawing

Series 10AC Triple Output
Input Voltage 90-130VAC (47-440Hz)
(Optional 170-240VAC, 47-440 Hz)***

	Main Output Voltage					Auxiliary Output Voltage						
Pico Part No.	Output Voltage (VDC)	Max. Load Current (mA)	Max. Output Power (watts)	V LD. Reg. 25%-100% Load (± %)*	Output Voltage Ripple @ Full Ld. 1-1 MHz BW mv p-p	Output Voltage DC Per Output	Max. Load Current (mA) Per Output	Max. Output Power (watts) Per Output	Volt. Load Reg. 25%-100% Load** (± %)*	Output Ripple @ Full Ld. 1-1 MHz BW mv p-p*	EFF @ Full Load Typical (%)	Price (US $)
10AC5T12	5	1400	7	0.5	50	± 12	125	1.5	5	50	77	351.22
10AC5T15	5	1400	7	0.5	50	± 15	100	1.5	5	50	77	351.22
10AC12T5	12	583	7	0.5	50	± 5	300	1.5	5	50	77	351.22
10AC15T5	15	466	7	0.5	50	± 5	300	1.5	5	50	79	351.22

	Common Characteristics Main Output Voltage Tolerance ± 0.5% Main Line Regulation ± 0.2%	Common Characteristics Auxiliary Output Voltage Tolerance ± 5% Auxillary Line Regulation ± 0.2%	
*Measurements Taken at 115VAC-60Hz. **10% minimum load required ***All units available with 170-240VAC input. Add H prefix to part number - $40 per unit cost added.			

For immediate engineering assistance or to place an order:
Call Toll Free: 800-431-1064

PICO Electronics, Inc.

143 Sparks Ave. Pelham, NY 10803
Tel: 914-738-1400
Fax: 914-738-8225