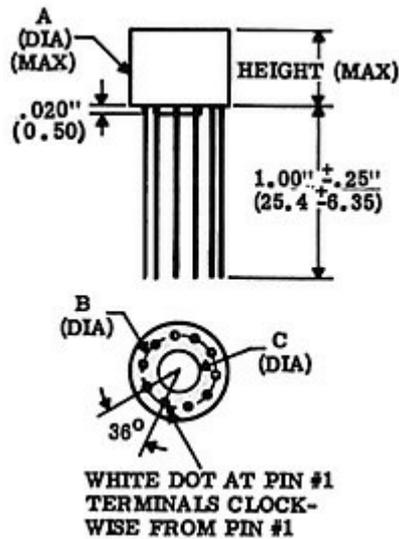


Ultra Miniature DC-DC Converter Transformers

Input Voltages of 5V, 12V, 24V, and 48V

Power Levels up to 40 Watts. All units are magnetically shielded.

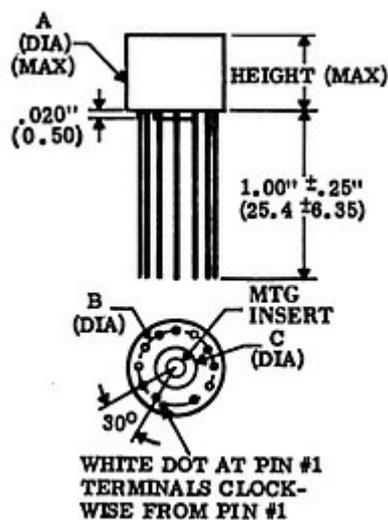
All units are magnetically shielded. All units can be supplied with higher or lower output voltages. Delivery-stock to one week for sample orders.



All dimensions are in inches (mm)

[Larger size drawing](#)

Size	Max. Height	A Max. Dia.	B Bolt Circle	C Stand-Off	Terminal Dia.
1	.280 (7.11)	.410 (10.41)	.260 (6.6)	.160 (4.06)	.012 (.31)
2	.340 (8.63)	.500 (12.7)	.350 (8.89)	.250 (6.35)	.012 (.31)
3	.415 (10.54)	.630 (16.0)	.440 (11.17)	.340 (8.64)	.016 (.41)



All dimensions are in inches (mm)

Note: Sizes 5 and 6 - pins 5, 8, and 9 are omitted.

[Larger size drawing](#)

Size	Max. Height	A Max. Dia.	B Bolt Circle	C Stand-Off	MTG. INSERT	Terminal Dia.
4	.500 (12.7)	.800 (20.32)	.560 (14.22)	.460 (4.06)	---	.016 (.41)
5	.340 (8.63)	.500 (12.7)	.350 (8.89)	.570 (14.48)	6-32 UNC 8 Threads Deep	.020 (.51)
6	.415 (10.54)	.630 (16.0)	.440 (11.17)	.700 (17.78)	6-32 UNC 8 Threads Deep	.020 (.51)

INPUT 5 VOLTS

PART NUMBER	D.C. OUT VOLTS			Max. POWER OUT		APPROX. SWITCH FREQ.		SIZE	*** PRICE 1-9 (US \$)
	BRIDGE	FULL WAVE	DUAL BRIDGE	-55°C to +105°C	-55°C to +70°C	SELF-SATURATED	SQUARE WAVE DRIVEN**		
31021	10	5	± 5	1.5W	3W	15K	30K TO 60K	1	71.22
31041	12	6	± 6	1.5W	3W	15K	30K TO 60K	1	71.22
31061	28	14	± 14	1.5W	3W	15K	30K TO 60K	1	71.22
31081	48	24	± 24	1.5W	3W	20K	40K TO 60K	1	71.22
31101	100	50	± 50	1.5W	3W	20K	40K TO 60K	1	71.22

INPUT 5 VOLTS

PART NUMBER	D.C. OUT VOLTS			Max. POWER OUT		APPROX. SWITCH FREQ.		SIZE	*** PRICE 1-9 (US \$)
	BRIDGE	FULL WAVE	DUAL BRIDGE	-55°C to +105°C	-55°C to +70°C	SELF-SATURATED	SQUARE WAVE DRIVEN**		
32106	10	5	± 5	3W	4.5W	15K	30K TO 60K	2	71.22
32126	12	6	± 6	3W	4.5W	15K	30K TO 60K	2	71.22
32146	28	14	± 14	3W	4.5W	15K	30K TO 60K	2	71.22
32166	48	24	± 24	3W	4.5W	20K	40K TO 60K	2	71.22
32186	100	50	± 50	3W	4.5W	20K	40K TO 60K	2	71.22
32189	150	75	± 75	3W	-	10K	30K TO 60K	2	82.03
32192	200	100	± 100	3W	-	10K	30K TO 60K	2	82.03
32195	300	150	± 150	3W	-	10K	30K TO 60K	2	82.03
33104	10	5	± 5	5W	7.5W	10K	20K TO 50K	3	71.22
33124	12	6	± 6	5W	7.5W	10K	20K TO 50K	3	71.22
33144	28	14	± 14	5W	7.5W	10K	20K TO 50K	3	71.22
33164	48	24	± 24	5W	7.5W	10K	20K TO 50K	3	71.22
33184	100	50	± 50	5W	7.5W	10K	20K TO 50K	3	71.22
33187	150	75	± 75	5W	-	10K	20K TO 50K	3	82.03
33190	200	100	± 100	5W	-	10K	20K TO 50K	3	82.03

33193	300	150	± 150	5W	-	10K	60K 30K TO 60K 30K TO 60K	3	82.03
34501	10	5	± 5	10W	14W	10K	20K TO 40K	4	71.22
34521	28	14	± 14	10W	14W	10K	20K TO 40K	4	71.22
34541	48	24	± 24	10W	14W	10K	20K TO 40K	4	71.22

**Lower switching frequency may be used at lower output power.

INPUT 12 VOLTS

PART NUMBER	D.C. OUT VOLTS			Max. POWER OUT		APPROX. SWITCH FREQ.		SIZE	*** PRICE 1-9 (US \$)
	BRIDGE	FULL WAVE	DUAL BRIDGE	-55°C to +105°C	-55°C to +70°C	SELF-SATURATED	SQUARE-WAVE DRIVEN**		
31121	12	6	± 6	1.5W	3W	15K	30K TO 60K	1	71.22
31141	24	12	± 12	1.5W	3W	15K	30K TO 60K	1	71.22
31161	28	14	± 14	1.5W	3W	15K	30K TO 60K	1	71.22
31181	48	24	± 24	1.5W	3W	20K	40K TO 60K	1	71.22
31201	100	50	± 50	1.5W	3W	20K	40K TO 60K	1	71.22
32206	12	6	± 6	3W	4.5W	15K	30K TO 60K	2	71.22
32226	24	12	± 12	3W	4.5W	15K	30K TO 60K	2	71.22
32246	28	14	± 14	3W	4.5W	15K	40K TO 60K	2	71.22
32266	48	24	± 24	3W	4.5W	20K	60K	2	71.22
32286	100	50	± 50	3W	4.5W	20K	40K TO 60K	2	71.22
32289	150	75	± 75	3W	-	10K	60K	2	82.03
32292	200	100	± 100	3W	-	10K	30K TO 60K	2	82.03
32295	300	150	± 150	3W	-	10K	60K	2	82.03
33204	12	6	± 6	5W	7.5W	15K	30K TO 60K	3	71.22
33224	28	14	± 14	5W	7.5W	15K	30K TO 60K	3	71.22
33244	48	24	± 24	5W	7.5W	20K	40K TO 60K	3	71.22
33264	100	50	± 50	5W	7.5W	20K	40K TO 60K	3	71.22
33267	150	75	± 75	5W	-	10K	60K	3	82.03
33270	200	100	± 100	5W	-	10K	30K TO 60K	3	82.03
33273	300	150	± 150	5W	-	10K	60K	3	82.03
							30K TO 50K 30K TO		

34561	24	12	±12	10W	14W	15K	50K	4	71.22
34581	28	14	±14	10W	14W	15K	30K TO 60K	4	71.22
34601	48	24	±24	10W	14W	15K	50K	4	71.22
34604	100	50	±50	7.5W	-	10K	30K TO 60K	4	82.03
34607	150	75	±75	7.5W	-	10K	60K	4	82.03
34610	200	100	±100	7.5W	-	10K	30K TO 60K	4	82.03
34613	300	150	±150	7.5W	-	10K	60K	4	82.03
							30K TO 60K		
							30K TO 60K		
							30K TO 60K		
35110	24	12	±12	17W	25W	-	30K TO 60K	5	102.47
35130	28	14	±14	17W	25W	-	30K TO 60K	5	102.47
35150	48	24	±24	17W	25W	-	30K TO 60K	5	102.47

INPUT 24 VOLTS

PART NUMBER	D.C. OUT VOLTS			Max. POWER OUT		APPROX. SWITCH FREQ.		SIZE	*** PRICE 1-9 (US \$)
	BRIDGE	FULL WAVE	DUAL BRIDGE	-55°C to +105°C	-55°C to +70°C	SELF-SATURATED	SQUARE-WAVE DRIVEN**		
31221	10	5	±5	1.5W	3W	15K	30K TO 60K	1	71.22
31241	28	14	±14	1.5W	3W	15K	30K TO 60K	1	71.22
31261	48	24	±24	1.5W	3W	20K	40K TO 60K	1	71.22
31281	100	50	±50	1.5W	3W	20K	40K TO 60K	1	71.22
32306	10	5	±5	3W	4.5W	15K	30K TO 60K	2	71.22
32326	28	14	±14	3W	4.5W	15K	30K TO 60K	2	71.22
32346	48	24	±24	3W	4.5W	20K	40K TO 60K	2	71.22
32366	100	50	±50	3W	4.5W	20K	40K TO 60K	2	71.22
32369	150	75	±75	3W	-	10K	60K	2	82.03
32372	200	100	±100	3W	-	10K	30K TO 60K	2	82.03
32375	300	150	±150	3W	-	10K	60K	2	82.03
33284	10	5	±5	5W	7.5W	15K	30K TO 60K	3	71.22
33304	28	14	±14	5W	7.5W	15K	30K TO 60K	3	71.22
33324	48	24	±24	5W	7.5W	20K	40K TO 60K	3	71.22
33344	100	50	±50	5W	7.5W	20K	40K TO 60K	3	71.22
33347	150	75	±75	5W	-	10K	60K	3	82.03
33350	200	100	±100	5W	-	10K	30K TO 60K	3	82.03
33353	300	150	±150	5W	-	10K	60K	3	82.03
							30K TO 50K		
							30K TO		

34621	28	14	± 14	10W	14W	15K	50K	4	71.22
34641	48	24	± 24	10W	14W	15K	30K TO 60K	4	71.22
34644	100	50	± 50	7.5W	-	10K	60K	4	82.03
34647	150	75	± 75	7.5W	-	10K	30K TO 60K	4	82.03
34650	200	100	± 100	7.5W	-	10K	60K	4	82.03
34653	300	150	± 150	7.5W	-	10K	30K TO 60K 30K TO 60K	4	82.03
35170	24	12	± 12	17W	25W	-	30K TO 60K	5	102.47
35190	28	14	± 14	17W	25W	-	30K TO 60K	5	102.47
35210	48	24	± 24	17W	25W	-	30K TO 60K	5	102.47
36710	48	24	± 24	25W	40W	-	30K TO 60K	6	123.31
36730	56	28	± 28	25W	40W	-	30K TO 60K	6	123.31

**Lower switching frequency may be used at lower output power.

INPUT 48 VOLTS

PART NUMBER	D.C. OUT VOLTS			Max. POWER OUT		APPROX. SWITCH FREQ.		SIZE	*** PRICE 1-9 (US \$)
	BRIDGE	FULL WAVE	DUAL BRIDGE	-55°C to +105°C	-55°C to +70°C	SELF- SATURATED	SQUARE- WAVE DRIVEN**		
31301	24	12	± 12	1.5W	3W	15K	30K TO 60K	1	71.22
31321	48	24	± 24	1.5W	3W	20K	40K TO 60K	1	71.22
31341	100	50	± 50	1.5W	3W	20K	40K TO 60K	1	71.22
31361	150	75	± 75	1.5W	3W	20K	40K TO 60K	1	78.32
32386	24	12	± 12	3W	4.5W	15K	30K TO 60K	2	71.22
32406	48	24	± 24	3W	4.5W	20K	40K TO 60K	2	71.22
32426	100	50	± 50	3W	4.5W	20K	40K TO 60K	2	71.22
32446	150	75	± 75	3W	4.5W	20K	40K TO 60K	2	71.22
32449	200	100	± 100	3W	4.5W	10K	30K TO 60K	2	82.03
32452	300	150	± 150	3W	4.5W	10K	30K TO 60K	2	82.03
33364	24	12	± 12	5W	7.5W	15K	30K TO 60K	3	71.22
33384	48	24	± 24	5W	7.5W	20K	40K TO 60K	3	71.22
33404	100	50	± 50	5W	7.5W	20K	40K TO 60K	3	71.22
33424	150	75	± 75	5W	7.5W	20K	40K TO 60K	3	71.22
33427	200	100	± 100	5W	-	10K	30K TO 60K	3	82.03
33430	300	150	± 150	5W	-	10K	30K TO 60K	3	82.03
							30K TO 50K 30K TO		

34661	24	12	± 12	10W	14W	15K	50K	4	71.22
34681	48	24	± 24	10W	14W	15K	30K TO 50K	4	71.22
34701	56	28	± 28	10W	14W	15K	30K TO 50K	4	71.22
34704	100	50	± 50	7.5W	-	10K	60K	4	82.03
34707	150	75	± 75	7.5W	-	10K	60K	4	82.03
34710	200	100	± 100	7.5W	-	10K	30K TO 60K	4	82.03
34713	300	150	± 150	7.5W	-	10K	30K TO 60K	4	82.03
35230	24	12	± 12	17W	25W	-	30K TO 60K	5	102.47
35250	48	24	± 24	17W	25W	-	30K TO 60K	5	102.47
35270	56	28	± 28	17W	25W	-	30K TO 60K	5	95.76
36750	48	24	± 24	25W	40W	-	30K TO 60K	6	123.31
36770	56	28	± 28	25W	40W	-	30K TO 60K	6	123.31
36790	100	50	± 50	25W	40W	-	30K TO 60K	6	123.31

****Lower switching frequency may be used at lower output power.**

***Discount Prices 1-9 Net; 10-24 less 10%; 25-49 less 16%; 50-99 less 23%; 100-499 less 30%

Ordering Instructions: No minimum.

Net 30 days F.O.B Pelham, New York

Features:

1. Units can be used as self-saturating or for linear switching applications. Operation over ambient temperature range from -55° C to +105° C. All units manufactured to the requirements of MIL-PRF-27, Grade 5, Class S.
2. All units can be supplied with higher or lower secondary voltages at the same power levels.
3. Secondary can be connected for full-wave bridge or dual bridge.
4. All units are magnetically shielded.

SCHEMATIC FOR SIZES 1, 2, AND 3 USING TRANSFORMERS AS LINEAR SWITCHING

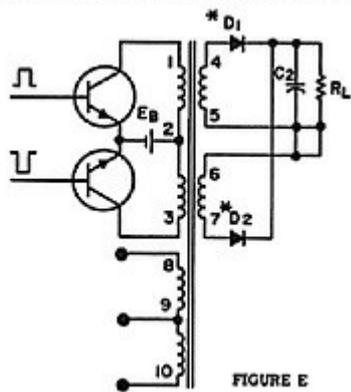


FIGURE E

* D1 AND D2 USE SCHOTTKY OR FAST SWITCHING DIODES

[Larger Size Schematic](#)

SCHEMATIC FOR SIZES 1, 2 & 3 USING TRANSFORMERS AS SELF-SATURATING

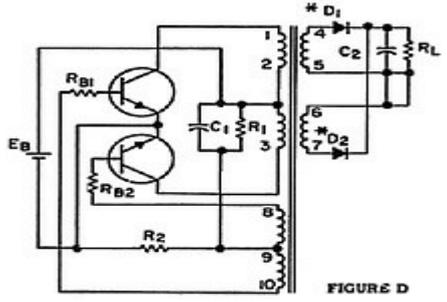


FIGURE D

[Larger Size Schematic](#)

SCHEMATIC FOR SIZE 4 USING TRANSFORMER AS SELF-SATURATING

* D1

SCHEMATIC FOR SIZE 4 USING TRANSFORMERS AS LINEAR SWITCHING.

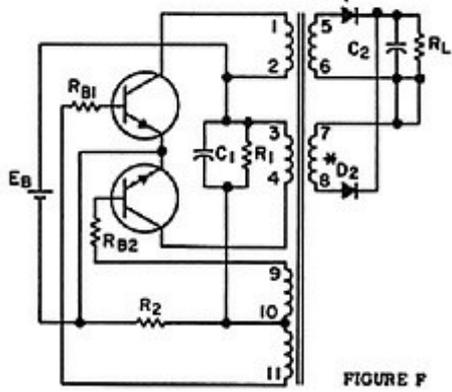


FIGURE F

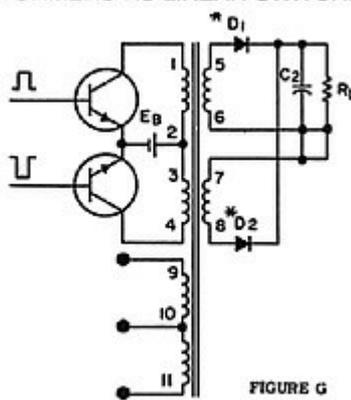


FIGURE G

*D1 & D2 USE SCHOTTKY OR FAST SWITCHING DIODES

[Larger Size Schematic](#)

[Larger Size Schematic](#)

SCHEMATIC FOR SIZES 5 & 6 USING TRANSFORMERS AS LINEAR SWITCHING.

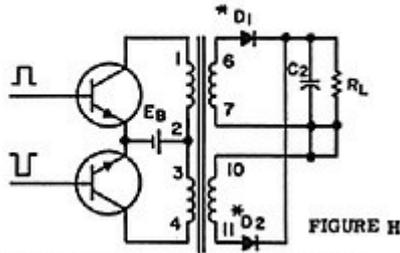


FIGURE H

*D1 & D2 USE SCHOTTKY OR FAST SWITCHING DIODES

[Larger Size Schematic](#)

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

PICO Electronics, Inc.

143 Sparks Ave. Pelham, NY 10803-1810

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

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