



MINIATURIZED DUAL & TRIPLE OUTPUT

PC BOARD MOUNTING
LINEAR REGULATED
AC-DC

SHIPPED IN 3 DAYS

ALL MODELS U.L. RECOGNIZED

These dual and triple output mini-modules are compact and convenient sources of the voltages required to power operational amplifiers and related circuits.

They may be mounted directly on printed circuit board assemblies, simplifying system layout and minimizing the connectors and wiring required.



STANDARD FEATURES

- May be used in series
- No derating or heat sinking required
- Short circuit protected
- Compact, lightweight

SPECIFICATIONS:

Input Voltage: 105-125 VAC, 47 to 420 Hz, single phase.

Output Specifications: See table.

Output Voltage Setting: Each output is factory preset to $\pm 2\%$ (1 to 9 volt outputs) or $\pm 1\%$ (10 to 28 volt outputs) of the nominal output voltage. Outputs of Case Size END modules, except those marked (*), may be trimmed to the nominal voltage rating with an external trim resistor.

Polarity: Single output sections may be used in either polarity. Dual output sections, marked (*), are provided with a plus/common/minus output connection configuration.

Ambient Operating Temperature: -20 to $+71^\circ\text{C}$. No derating required.

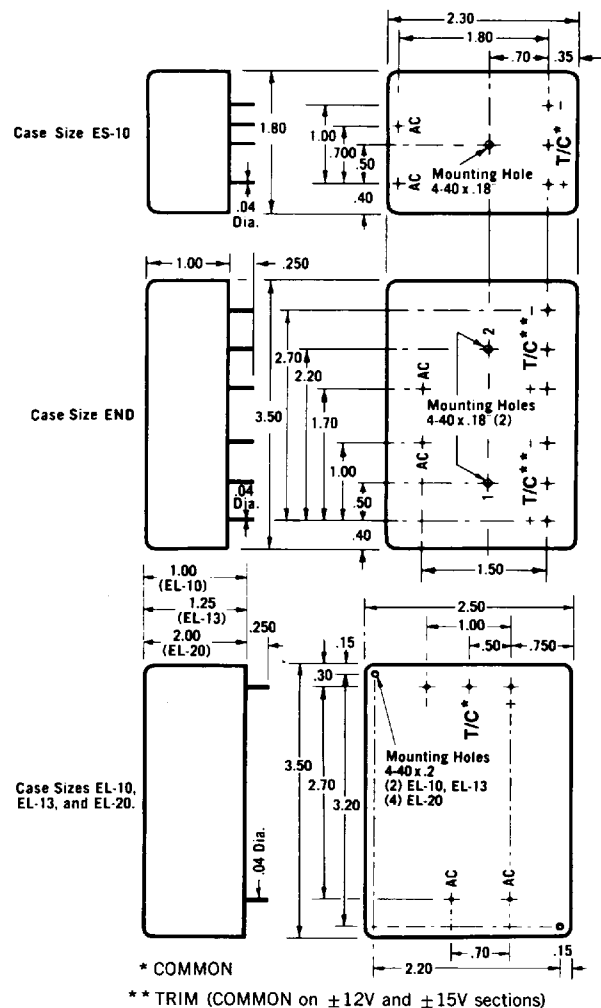
Storage Temperature: -55 to $+85^\circ\text{C}$.

Temperature Coefficient: From 9 to 28 volts, typical TC is $0.015\%/^\circ\text{C}$; 1 to 8 volts, $0.03\%/^\circ\text{C}$.

Impedance: 0.07 ohms at 1 kHz and 0.2 ohms at 10 kHz (approx.).

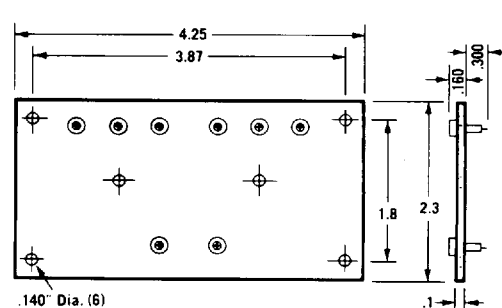
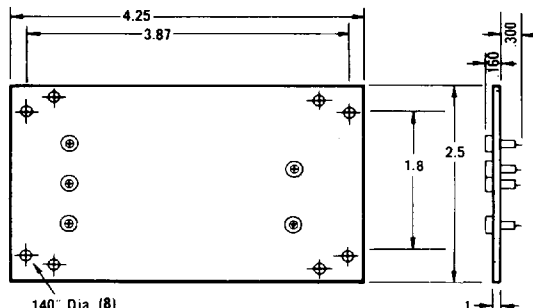
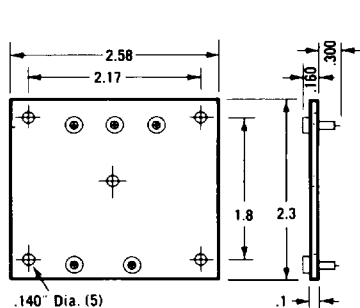
Weight: 7 oz. (Case size ES-10.)
13 oz. (Case size END.)
13 oz. (Case size EL-10.)
1 lb. 3 oz. (Case size EL-13.)
1 lb. 15 oz. (Case size EL-20.)

Optional 230 Volt Input: All models can be alternately furnished for operation on an input of 210 to 250 VAC, 47-420 Hz. To order, add suffix " - 230" to model number and \$10.00 to price.



ACCESSORY SOCKETS

Each of these sockets has a sturdy phenolic base with gold plated teflon-insulated contacts.



Model ES-1 (for case sizes ES-10 and ESC-10) . . . \$15.00 ea.

Model EL-1 (for case sizes EL-10, EL-13, EL-20 and ELC-10) . . . \$15.00 ea.

Model END-1 (for case size END) . . . \$15.00 ea.

DUAL (ISOLATED) & TRIPLE OUTPUT, USER-SELECTED

How to Order:

Any two of the sections listed below, or two of the same section, can be combined into a multiple-output module. The complete model number is the combination of the two section numbers selected. Note that some sections provide two outputs; combination with a single output section results in a triple-output module.

Example: The combination of sections 6E20D and 15E10D is the Model 6E20D-15E10D. Always assign the lower voltage section first. For pricing purposes, add the costs of the sections selected. Example: The price of the Model 6E20D-15E10D is \$52.00 plus \$45.00, or \$97.00 total.

Nominal Output Voltage	Output Current Amps.	Regulation		Ripple mv RMS	Price per Section	Section (See "How to order")	Case Size
		Load ± %	Line ± %				
1	.250	.1	.05	0.5	\$52	1E25D	END
1.5	.250	.1	.05	0.5	52	1.5E25D	END
2	.200	.1	.05	0.5	52	2E20D	END
3	.250	.1	.05	0.5	52	3E25D	END
3.6	.250	.05	.05	0.5	52	3.6E25D	END
4	.200	.05	.05	0.5	52	4E20D	END
5	.250	.05	.05	0.5	52	5E25D	END
6	.200	.05	.05	0.5	52	6E20D	END
7	.170	.05	.05	0.5	52	7E17D	END
8	.150	.05	.05	0.5	52	8E15D	END
9	.130	.05	.05	0.5	45	9E13D	END
10	.120	.02	.02	0.5	45	10E12D	END
±12*	.050	.10	.05	1	52	D12E05	END
12	.100	.02	.02	0.5	45	12E10D	END
12	.150	.05	.05	0.5	55	12E15D	END
13	.100	.02	.02	0.5	45	13E10D	END

Nominal Output Voltage	Output Current Amps.	Regulation		Ripple mv RMS	Price per Section	Section (See "How to order")	Case Size
		Load ± %	Line ± %				
14	.100	.02	.02	0.5	\$45	14E10D	END
±15*	.050	.10	.05	1	52	D15E05	END
15	.100	.02	.02	0.5	45	15E10D	END
15	.150	.05	.05	0.5	55	15E15D	END
16	.080	.02	.02	0.5	45	16E08D	END
17	.070	.02	.02	0.5	45	17E07D	END
18	.060	.02	.02	0.5	45	18E06D	END
20	.060	.02	.02	0.5	45	20E06D	END
21	.060	.02	.02	0.5	45	21E06D	END
22	.050	.02	.02	0.5	45	22E05D	END
23	.050	.02	.02	0.5	45	23E05D	END
24	.050	.02	.02	0.5	45	24E05D	END
25	.050	.02	.02	0.5	45	25E05D	END
26	.040	.02	.02	0.5	45	26E04D	END
27	.040	.02	.02	0.5	45	27E04D	END
28	.040	.02	.02	0.5	45	28E04D	END

*Dual output section. Combination with a single output section results in a triple output module.

DUAL TRACKING OUTPUTS

(These model numbers are complete as shown.)

Nominal Output Voltages	Current per Output Amps.	Regulation		Ripple mv RMS	Price	Model	Case Size
		Load ± %	Line ± %				
±5	.150	.1	.05	1.5	\$ 79	D5-15	EL-10
±5	.250	.1	.05	1.5	98	D5-25	EL-10
±5	.500	.1	.05	1.5	135	D5-50	EL-20
±10	.200	.05	.05	1	89	D10-20	EL-10
±10	.300	.05	.05	1	115	D10-30	EL-13
±10	.400	.1	.05	1	135	D10-40	EL-20
±12	.025	.1	.05	1	49	D12-03	EL-10
±12	.050	.1	.05	1	59	D12-05	EL-10
±12	.100	.05	.05	1	69	D12-10A	EL-10
±12	.150	.05	.05	1	79	D12-15A	EL-10

Nominal Output Voltages	Current per Output Amps.	Regulation		Ripple mv RMS	Price	Model	Case Size
		Load ± %	Line ± %				
±12	.200	.05	.05	1	\$ 89	D12-20	EL-10
±12	.300	.05	.05	1	105	D12-30	EL-13
±12	.350	.05	.05	1	115	D12-35	EL-13
±12	.500	.1	.05	1	135	D12-50	EL-20
±15	.025	.1	.05	1	49	D15-03	ES-10
±15	.050	.1	.05	1	59	D15-05	ES-10
±15	.100	.05	.05	1	69	D15-10A	EL-10
±15	.150	.05	.05	1	79	D15-15A	EL-10
±15	.200	.05	.05	1	89	D15-20	EL-10
±15	.300	.05	.05	1	105	D15-30	EL-13
±15	.350	.05	.05	1	115	D15-35	EL-13
±15	.500	.1	.05	1	135	D15-50	EL-20



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