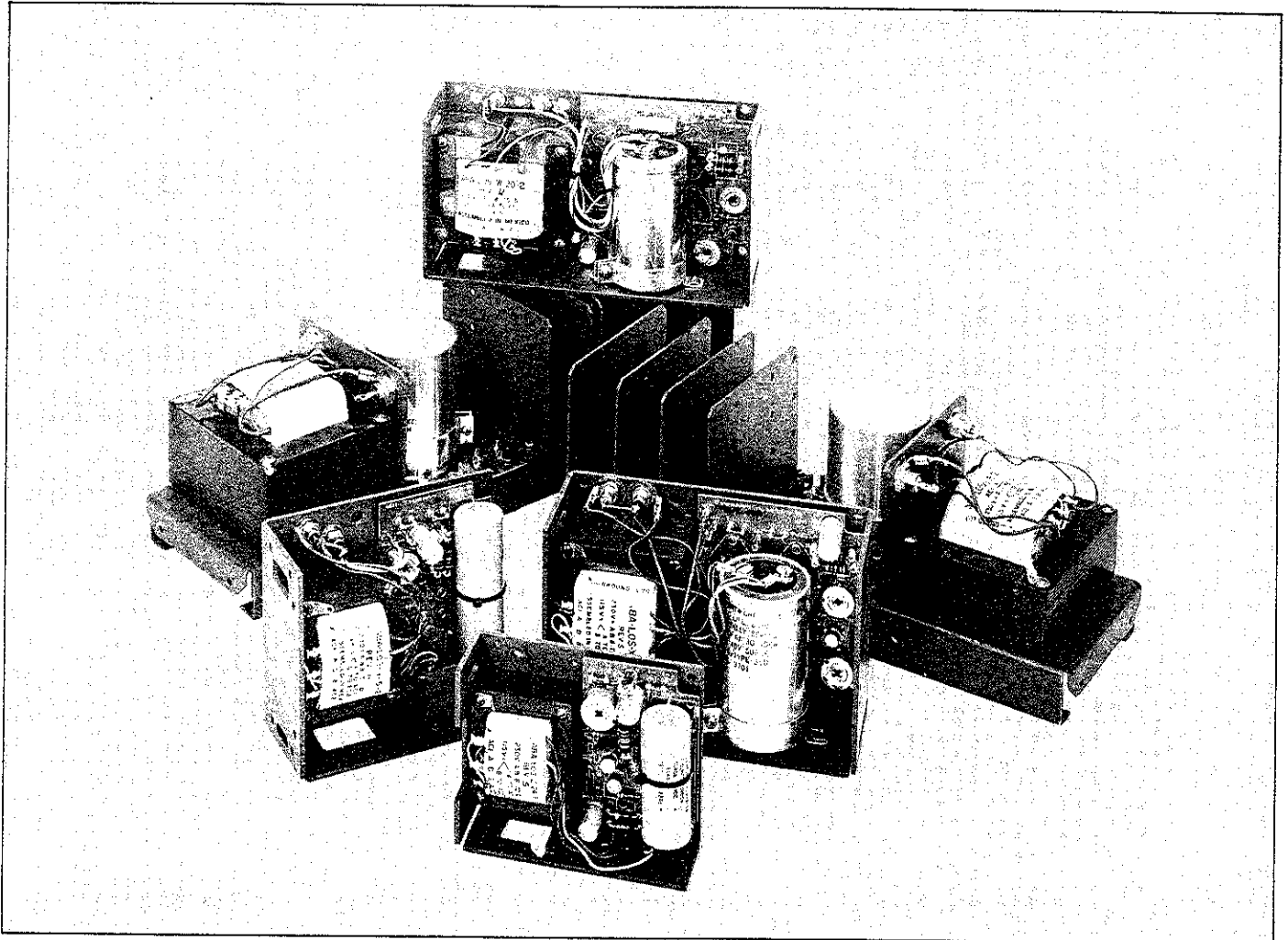


OEM Linear

Lambda LO series



Features — LO series

AC input 105 to 125 VAC or 210-250 VAC, 47-440 Hz

UL Recognized

3 mounting positions

No overshoot on turn-on, turn-off, or power failure

Integrated circuit regulation

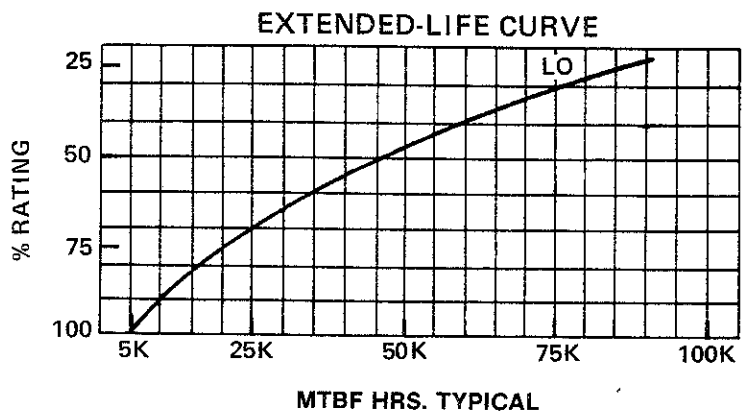
Convection cooled, no internal fans or blowers or external heat sinking required

Foldback current limiting

6 package sizes up to 28 VDC, up to 25 A

Ambient operating temperature range continuous duty from 0°C to +60°C

Temperature coefficient 0.03%/°C



Specifications—LO Series

DC Output

Voltage range shown in tables.

REGULATED VOLTAGE

regulation, line	0.15% for 105 to 125 VAC
regulation, load	0.15% for 100% load change
ripple and noise	1.5 mV RMS, 5 mV pk-pk with either positive or negative terminal grounded
remote programming resistance	200 ohms/volt nominal (LOS units only)
remote programming voltage	volt/volt (LOS units only)
temperature coefficient	0.03%/°C

AC Input

line	105-125 VAC/210-250 VAC, 47-440 Hz (derate 10% at 50 Hz). Consult factory for operation at frequencies other than 47 to 63 Hz. Units are factory wired for 105-125 VAC
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Efficiency

minimum	25% for 5 V, 6V models, 35% for 12V, 15 V and triple output models, 48% for 20 V, 24 V, 28 V models, ± 15 to ± 12 V models.
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Overshoot

No overshoot on turn-on, turn-off or power failure.

Ambient Operating Range

Continuous duty from 0° to 60° C.

Storage Temperature Range

-55° C to +85° C

Overload Protection

ELECTRICAL

External overload protection; automatic electronic current limiting circuit limits the current to a preset value, thereby providing protection for the load as well as the power supply.

Overvoltage Protection

Overvoltage protectors are available for all models. LO-Z, LO-Y use the L-6-OV overvoltage protectors. LO-X, LO-W series power supplies use the L-12-OV, L-6-OV overvoltage protectors. LO-V series power supplies use the L-20-OV overvoltage protectors. LO-R series power supplies use the L-35-OV overvoltage protectors in the 5 and 6 volt units and the L-20-OV overvoltage protectors in the other voltages. See page 66 for complete specifications of overvoltage protectors.

Input and Output Connections

AC Input—Heavy duty terminals on transformer.

DC Output—Heavy duty stud terminals on printed circuit board.

Cooling

Units are rated at 40° C in free air and must be derated or fan cooled when mounted in confined area with no air circulation.

Controls

DC Output Control

Simple screwdriver voltage adjustment over voltage range.

Remote Sensing

Provision is made for remote sensing to eliminate effects of power output lead resistance on DC regulation. Connected for local sensing at factory.

Finish

Gray, FED. STD. 595 No. 26081.

Tracking Accuracy

(Dual and Triple Output Models Only) 4% absolute voltage difference, 0.2% change for all conditions of line, load, and temperature.

Mounting

Three mounting surfaces and three mounting positions for models W, X, Y, Z. One mounting surface for Models V and R.

Physical Data

Package Model	Weight		Size Inches
	Lbs. Net	Lbs. Ship	
LO-Z	2	2-1/4	4-7/8 x 4 x 1-5/8
LO-Y	4	4-1/4	5-5/8 x 4-7/8 x 2-1/2
LO-X	6-1/2	7	7 x 4-7/8 x 2-3/4
LO-W	7-3/4	8-1/4	9 x 4-7/8 x 2-3/4
LO-V	10-1/4	11-3/4	4-7/8 x 13-3/4 x 4-7/8
LO-R	14-3/4	16-1/4	4-7/8 x 16-3/4 x 4-7/8

Guaranteed for 90 Days

90-day guarantee includes labor as well as parts. Guarantee applies to operation at full published specification at end of 90-days.

AI Recognized

OEM Linear selector guide

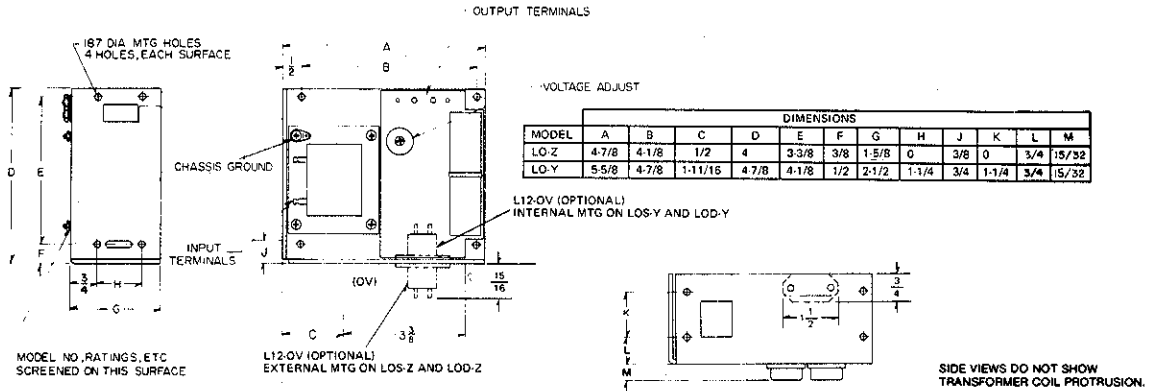
LO series. Triple, dual & single outputs.

MODEL	REGULATION (LINE OR LOAD)	RIPPLE (RMS)	VOC	MAX. CURRENT (AMPS)			COMPLETE ELEC. SPEC. PG	PKG. SIZE	DIMENSIONS (INCHES)	COMPLETE MECH. SPEC. PG	PRICE QUANTITY		
				40°C	50°C	60°C					1	25	100
TRIPLE OUTPUT													
5V ±5% ADJ., ±15 to ±12 VOLTS* ADJ.													
LOT-X-5152A	0.15%	1.5mV	5 ±5%	3.0	2.2	1.4	51	X	7 x 4-7/8 x 2-3/4	133	\$155	\$124	\$112
			±15 to ±12	0.50	0.375	0.20							
LOT-W-5152A	0.15%	1.5mV	5 ±5%	6.0	4.5	3.0	51	W	9 x 4-7/8 x 2-3/4	133	191	156	140
			±15 to ±12	1.0	0.75	0.40							
LOT-V-5152A	0.15%	1.5mV	5 ±5%	9.0	7.3	5.2	51	V	4-7/8 x 13-3/4 x 4-7/8	133	269	219	196
			±15 to ±12	2.0	1.4	0.75							
DUAL OUTPUT													
±15 to ±12 VOLTS* ADJ.													
LOD-Z-152	0.15%	1.5mV		0.50	0.37	0.25	51	Z	4-7/8 x 4 x 1-5/8	133	83	67	56
LOD-Y-152	0.15%	1.5mV		1.0	0.75	0.50	51	Y	5-5/8 x 4-7/8 x 2-1/2	133	98	79	61
LOD-X-152	0.15%	1.5mV		2.0	1.4	0.80	51	X	7 x 4-7/8 x 2-3/4	133	143	117	97
LOD-W-152	0.15%	1.5mV		3.0	2.2	1.4	51	W	9 x 4-7/8 x 2-3/4	133	168	136	109
SINGLE OUTPUT													
5 VOLTS ±5% ADJ.													
LOS-Z-5	0.15%	1.5mV		3.0	2.4	1.8	51	Z	4-7/8 x 4 x 1-5/8	133	66	53	43
LOS-Y-5	0.15%	1.5mV		6.0	4.9	3.8	51	Y	5-5/8 x 4-7/8 x 2-1/2	133	103	82	70
LOS-X-5	0.15%	1.5mV		9.0	7.6	6.2	51	X	7 x 4-7/8 x 2-3/4	133	129	102	84
LOS-W-5	0.15%	1.5mV		12.0	10.5	8.5	51	W	9 x 4-7/8 x 2-3/4	133	165	132	111
LOS-V-5	0.15%	1.5mV		17.0	14.5	11.5	51	V	4-7/8 x 13-3/4 x 4-7/8	133	198	149	142
LOS-R-5	0.15%	1.5mV		25.0	21.5	17.5	51	R	4-7/8 x 16-3/4 x 4-7/8	133	260	208	186
6 VOLTS ±5% ADJ.													
LOS-Z-6	0.15%	1.5mV		2.5	2.1	1.6	51	Z	4-7/8 x 4 x 1-5/8	133	66	53	43
LOS-Y-6	0.15%	1.5mV		5.0	4.3	3.5	51	Y	5-5/8 x 4-7/8 x 2-1/2	133	103	82	70
LOS-X-6	0.15%	1.5mV		8.5	7.1	5.7	51	X	7 x 4-7/8 x 2-3/4	133	129	102	84
12 VOLTS ±5% ADJ.													
LOS-Z-12	0.15%	1.5mV		1.6	1.3	1.0	51	Z	4-7/8 x 4 x 1-5/8	133	66	53	43
LOS-Y-12	0.15%	1.5mV		3.3	2.8	2.3	51	Y	5-5/8 x 4-7/8 x 2-1/2	133	103	82	70
LOS-X-12	0.15%	1.5mV		5.7	4.8	3.9	51	X	7 x 4-7/8 x 2-3/4	133	129	102	84
LOS-W-12	0.15%	1.5mV		7.0	5.8	4.6	51	W	9 x 4-7/8 x 2-3/4	133	165	132	111
LOS-V-12	0.15%	1.5mV		10.8	9.0	6.7	51	V	4-7/8 x 13-3/4 x 4-7/8	133	198	149	142
LOS-R-12	0.15%	1.5mV		16.0	13.5	10.5	51	R	4-7/8 x 16-3/4 x 4-7/8	133	260	208	186
15 VOLTS ±5% ADJ.													
LOS-Z-15	0.15%	1.5mV		1.4	1.2	1.0	51	Z	4-7/8 x 4 x 1-5/8	133	66	53	43
LOS-Y-15	0.15%	1.5mV		2.8	2.5	2.1	51	Y	5-5/8 x 4-7/8 x 2-1/2	133	103	82	70
LOS-X-15	0.15%	1.5mV		4.8	4.0	3.2	51	X	7 x 4-7/8 x 2-3/4	133	129	102	84
LOS-W-15	0.15%	1.5mV		6.3	5.2	4.0	51	W	9 x 4-7/8 x 2-3/4	133	165	132	111
LOS-R-15	0.15%	1.5mV		14.0	11.5	8.8	51	R	4-7/8 x 16-3/4 x 4-7/8	133	260	208	186
20 VOLTS ±5% ADJ.													
LOS-Z-20	0.15%	1.5mV		1.0	0.8	0.6	51	Z	4-7/8 x 4 x 1-5/8	133	66	53	43
LOS-Y-20	0.15%	1.5mV		2.4	2.1	1.8	51	Y	5-5/8 x 4-7/8 x 2-1/2	133	103	82	70
LOS-X-20	0.15%	1.5mV		3.8	3.2	2.5	51	X	7 x 4-7/8 x 2-3/4	133	129	102	84
LOS-R-20	0.15%	1.5mV		11.5	9.5	7.1	51	R	4-7/8 x 16-3/4 x 4-7/8	133	260	208	186
24 VOLTS ±5% ADJ.													
LOS-Z-24	0.15%	1.5mV		0.9	0.75	0.55	51	Z	4-7/8 x 4 x 1-5/8	133	66	53	43
LOS-Y-24	0.15%	1.5mV		2.2	1.9	1.6	51	Y	5-5/8 x 4-7/8 x 2-1/2	133	103	82	70
LOS-X-24	0.15%	1.5mV		3.3	2.8	2.2	51	X	7 x 4-7/8 x 2-3/4	133	129	102	84
LOS-W-24	0.15%	1.5mV		4.8	3.8	2.8	51	W	9 x 4-7/8 x 2-3/4	133	165	132	111
LOS-V-24	0.15%	1.5mV		6.6	5.2	3.8	51	V	4-7/8 x 13-3/4 x 4-7/8	133	198	149	142
LOS-R-24	0.15%	1.5mV		10.5	8.3	6.0	51	R	4-7/8 x 16-3/4 x 4-7/8	133	260	208	186
28 VOLTS ±5% ADJ.													
LOS-Z-28	0.15%	1.5mV		0.8	0.65	0.45	51	Z	4-7/8 x 4 x 1-5/8	133	66	53	43
LOS-Y-28	0.15%	1.5mV		2.0	1.7	1.4	51	Y	5-5/8 x 4-7/8 x 2-1/2	133	103	82	70
LOS-X-28	0.15%	1.5mV		3.1	2.5	1.9	51	X	7 x 4-7/8 x 2-3/4	133	129	102	84
LOS-W-28	0.15%	1.5mV		4.2	3.3	2.4	51	W	9 x 4-7/8 x 2-3/4	133	165	132	111
LOS-V-28	0.15%	1.5mV		5.9	4.6	3.3	51	V	4-7/8 x 13-3/4 x 4-7/8	133	198	149	142
LOS-R-28	0.15%	1.5mV		9.3	7.5	5.6	51	R	4-7/8 x 16-3/4 x 4-7/8	133	260	208	186

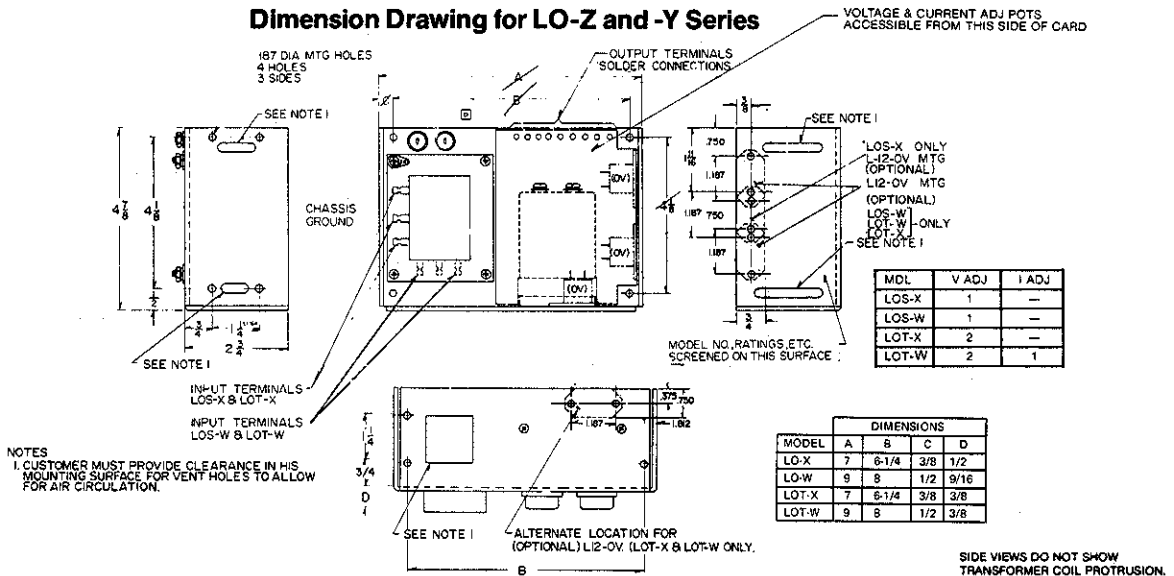
*±15 to ±12 volts are each dual tracking outputs.

PART IV—DIMENSIONAL DRAWINGS

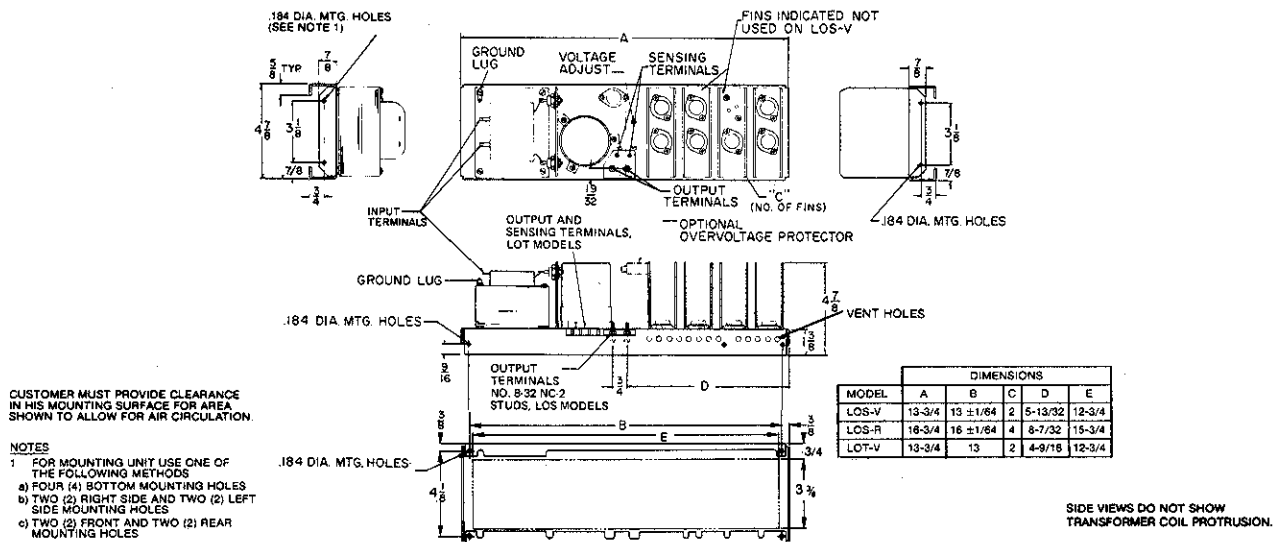
LO SERIES POWER SUPPLIES



Dimension Drawing for LO-Z and -Y Series



Dimension Drawing for LO-X and -W Series



Dimension Drawing for LO-V and -R Series