



PRODUCT DESCRIPTION

The L Series is a line of small, versatile, component level building blocks that provide up to 3,000 VDC, positive or negative, in a compact PC mount package. The isolated output is directly proportional to the input. Either output may be grounded to generate positive or negative high voltage. Excellent filtering techniques and a low noise sinewave oscillator provide clean, reliable DC to HV DC conversion with low ripple, noise, and EMI/RFI. Two pin-out options are available in this series; add an "A" or "B" for your choice (see below). An external metal enclosure is also available, just add an "AB" to the model number (i.e. L30BAB).

ELECTRICAL SPECIFICATIONS*4

PARAMETER	VALUE
INPUT VOLTAGE	0-12 Volts
INPUT CURRENT	<150mA No Load, <300mA Full Load
TYPICAL TURN-ON VOLTAGE	<2 Volts
REGULATION	10% (No Load to Full Load)
ISOLATION	3,500 Volts
OPERATING TEMP	-10° to 60° C (CASE)

PRODUCT SELECTION TABLE

MODEL*3	OUTPUT*2 VOLTAGE	OUTPUT*1 CURRENT	RIPPLE P-P
L03	0 TO 300	5.00 mA	0.075%
L05	0 TO 500	3.00 mA	0.075%
L10	0 TO 1,000	1.50 mA	0.025%
L12	0 TO 1,200	1.25 mA	0.025%
L15	0 TO 1,500	1.00 mA	0.030%
L20	0 TO 2,000	0.75 mA	0.025%
L25	0 TO 2,500	0.60 mA	0.200%
L30	0 TO 3,000	0.50 mA	0.200%

FEATURES

- Low Ripple
- Proven Reliability
- Extensive Filtering and Shielding
- Proportional Input/Output
- Low Cost/High Performance
- L15B and L30B replace obsolete -"Venus" C15 and C30 Models
- MTBF > 2.31 million hours per Bellcore TR-332
- RoHS Compliant

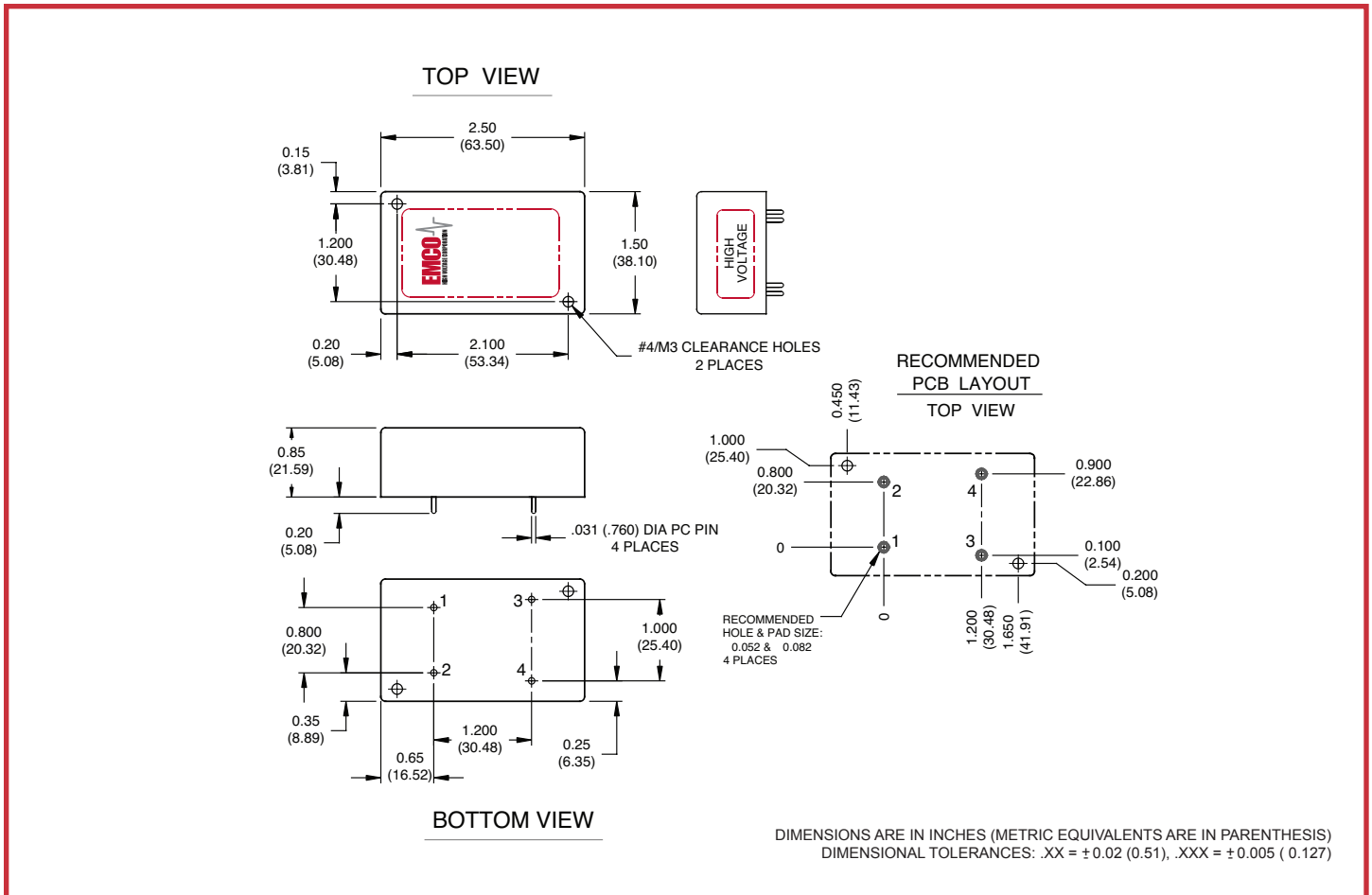
OPTIONS

- Two Pin Patterns (Order as L12A or L12B)
- External Metal Enclosure add 'AB' (Example L12BAB)
- Reverse Polarity Output (Example L12BR)

APPLICATIONS

- Photomultiplier Tubes
- Mass Spectrometers
- Avalanche Photo Diodes
- Microchannel Plates

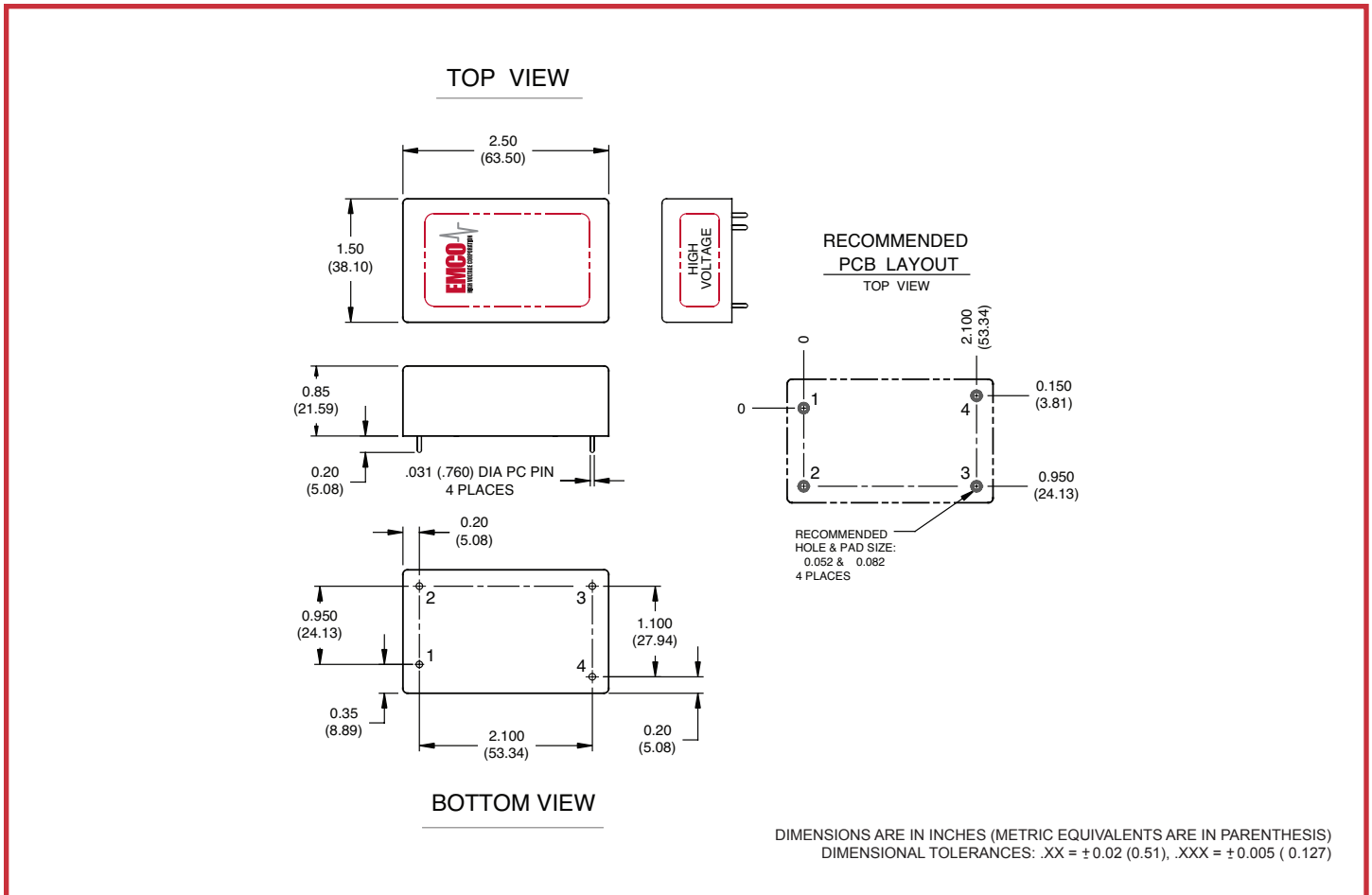
MECHANICAL SPECIFICATIONS - CASE A



PARAMETER	VALUE
SIZE	2.50L (63.50L) x 1.50W (38.10W) x 0.85H (21.59H)
WEIGHT	3 OUNCES (85 GRAMS) APPROXIMATELY
PACKAGING	FULLY ENCAPSULATED
CASE MATERIAL	GLASS-FILLED EPOXY
MOUNTING	FOUR PC PINS OR HOLES ("A" PIN-OUT PATTERN ONLY)

PIN	FUNCTION	REVERSED
1	(+) INPUT	(+) INPUT
2	(-) INPUT	(-) INPUT
3	(-) HV OUTPUT	(+) HV OUTPUT
4	(+) HV OUTPUT	(-) HV OUTPUT

MECHANICAL SPECIFICATIONS - CASE B



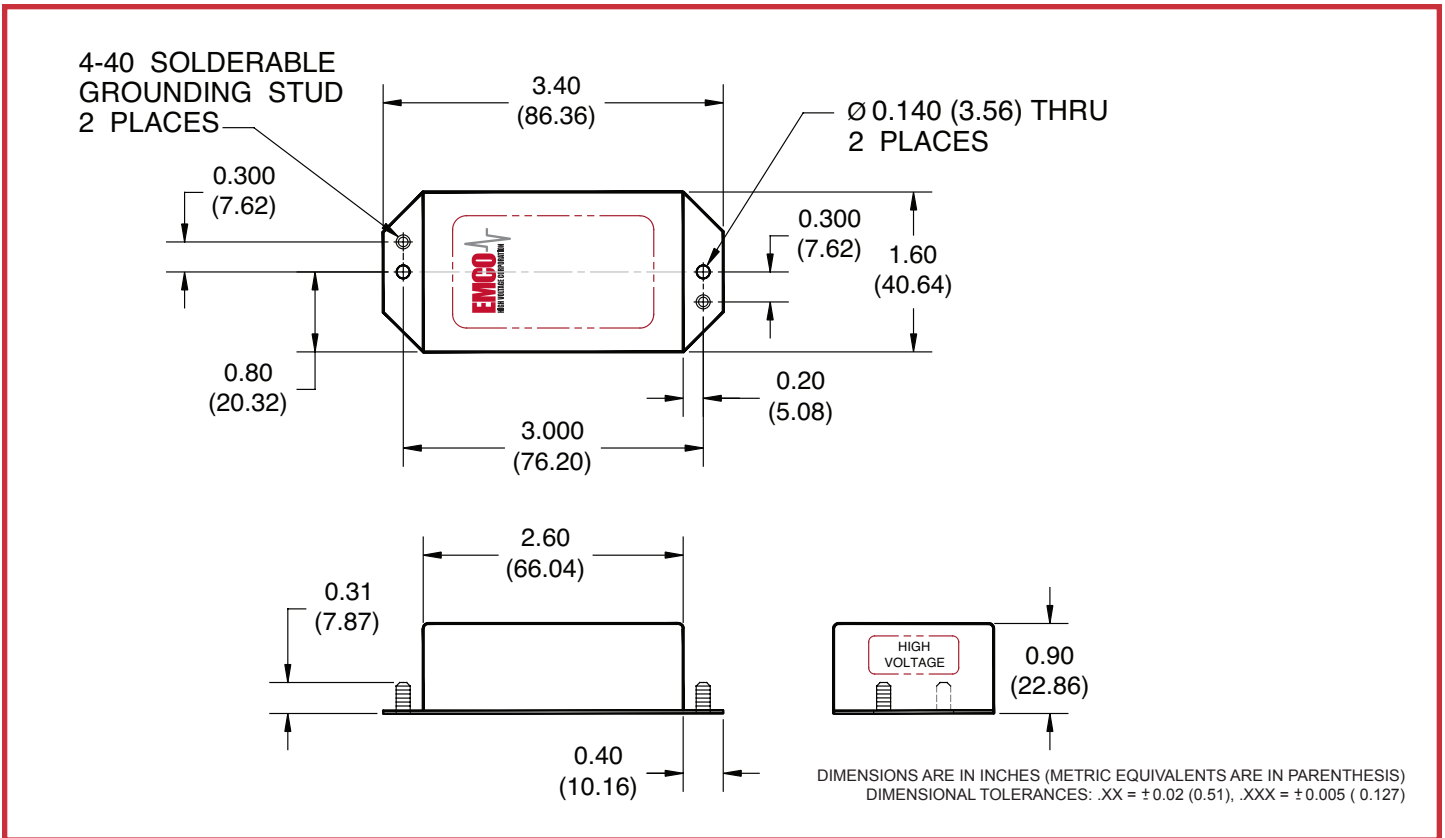
PARAMETER	VALUE
SIZE	2.50L (63.50L) x 1.50W (38.10W) x 0.85H (21.59H)
WEIGHT	3 OUNCES (85 GRAMS) APPROXIMATELY
PACKAGING	FULLY ENCAPSULATED
CASE MATERIAL	GLASS-FILLED EPOXY
MOUNTING	FOUR PC PINS

PIN	FUNCTION	REVERSED
1	(+) INPUT	(+) INPUT
2	(-) INPUT	(-) INPUT
3	(-) HV OUTPUT	(+) HV OUTPUT
4	(+) HV OUTPUT	(-) HV OUTPUT

- Note:
1. At Maximum Rated Output Voltage.
 2. Output Voltage is load dependent. Under light or no load conditions, reduce input voltage so maximum rated output voltage is not exceeded.
 3. Pin-out pattern "A" or "B" must be specified with model number (e.g. L05B).
 4. Specifications after 30 minute warm-up, full load, at 25°C unless otherwise noted.

XP EMCO reserves the right to make changes on products and literature, including specifications, without notice. XP EMCO standard product models are not recommended for "copy-exact" applications or any other application restricting product changes. "Copy-exact" options are available. Please contact an XP EMCO sales representative for more details.

EXTERNAL EMI/RFI SHIELD



PARAMETER	VALUE
BOX SIZE	See table
MATERIAL	0.03 (0.76mm) Aluminum
FINISH	Black Anodize
MOUNTING	Two Tabs With Thru-Holes

PARAMETER	VALUE
GROUND	Black Anodized Aluminum
DIMENSIONS WITH TAB	3.4L (86.36L) x 1.6W (40.64W) x 0.9H (22.86H)
DIMENSIONS WITHOUT TAB	2.6L (66.04L) x 1.6W (40.64W) x 0.9H (22.86H)

SHIELD DESCRIPTION

The “AB” Series provides low cost EMI/RFI shielding and rugged mounting for XP EMCO High Voltage DC to DC converters. These five-sided aluminum enclosures feature a durable, non-conductive black anodized finish. The enclosures are manufactured at our own sheet metal fabrication facility, which allows for low cost and stock delivery. Add an “AB” suffix to the model number for a factory-installed enclosure (e.g. E10AB). Contact our sales department by phone, fax or email for immediate attention.

APPLICATION INFORMATION

On models with outputs of 3kV or higher, special care must be taken to ensure adequate spacing and insulation between the metal can and the high voltage output. Single sided layout, encapsulants or conformal coating may be required.

Case grounding stud must be connected to ground. Case ground is not internally connected to (-) input.