

EIA RS-314

EIA STANDARD

Envelope and Mounting Dimensions for Encapsulated Transformers and Inductors

*(Using Cores Listed in Table I
of EIA Standard RS-217-A)*

RS-314



May 1965

Engineering Department

ELECTRONIC INDUSTRIES ASSOCIATION

NOTICE

EIA engineering standards are designed to serve the public interest through eliminating misunderstandings between manufacturers and purchasers, facilitating interchangeability and improvement of products, and assisting the purchaser in selecting and obtaining with minimum delay the proper product for his particular need. Existence of such standards shall not in any respect preclude any member or non-member of EIA from manufacturing or selling products not conforming to such standards.

Recommended standards adopted by EIA are without any regard to whether or not their adoption may in any way involve patents on articles, materials, or processes. By such action, EIA does not assume any liability to any patent owner, nor does it assume any obligation whatever to parties adopting the recommended standards.

Published by

ELECTRONIC INDUSTRIES ASSOCIATION

Engineering Department

11 West 42nd Street, New York, N. Y. 10036

© Electronic Industries Association 1965

All Rights Reserved

Price \$.60

Printed in U.S.A

ENVELOPE AND MOUNTING DIMENSIONS FOR ENCAPSULATED TRANSFORMERS AND INDUCTORS USING CORES LISTED IN TABLE I OF EIA STANDARD RS-217-A

*(From Standards Proposal No. 841 formulated under the cognizance of EIA Working Group P-3.5
on Mounting Dimensions for 400 Cycle Encapsulated Transformers, and Committee P-3
on Inductive Components.)*

1. SCOPE

This standard establishes the maximum envelope dimensions and nominal mounting dimensions for encapsulated transformers and inductors using cores listed in Table I of EIA Standard RS-217-A. This standard also establishes formulae from which these dimensions are developed.

For the purposes of this standard, encapsulated units shall be those which are either dipped, conformally coated, cast, embedded, molded, encased, impregnated, filled or otherwise protected with a non-metallic substance.

2. EXPLANATORY NOTES

2.1 Dimensions other than screw threads are in inches.

2.2 The transformer or inductor configuration shall be determined by the manufacturing process.

2.3 Tolerances on mounting dimensions L and M in Tables 1, 2 and 3 are:

<u>Unit with Mounting Stud Size</u>	<u>Tolerance</u>
4-40, 6-32, 8-32, and 10-32	$\pm \frac{1}{64}$
$\frac{1}{4}$ -20 and $\frac{5}{16}$ -18	$\pm \frac{1}{32}$

Dimensions L and M shall be located symmetrically to the maximum H and J dimensions, respectively, within $\frac{1}{64}$ inch.

2.4 Mounting studs lengths and tolerances shall be specified in the complementary documents, such as drawings or purchase specifications, for the transformer or inductor. Mounting screw inserts or clearance holes may be supplied in lieu of studs when specified.

2.5 Envelope dimensions do not include terminal extensions.

2.6 Any computed envelope dimension which has a sum total resulting in a fraction of less than $\frac{1}{32}$ is carried to next highest $\frac{1}{32}$ of an inch.

2.7 Any computed mounting dimension which has a sum total resulting in a fraction of less than $\frac{1}{16}$ inch is carried to the next highest $\frac{1}{16}$ inch.

2.8 The formulae included in paragraph 3.3, 4.3, and 5.3 are based on the dimensions contained in Figure 1.

¹ RS-217-A, Wound Cut Cores, available from EIA Engineering Office, Room 1000, 11 West 42nd Street, New York, New York 10036 at \$.70 per copy.