



Part Number: 9598283402

Frequency Range: Dimensions

Description: 98 EER CORE

Application: Inductive Components

Where Used: Closed Magnetic Circuit

Part Type: EER Cores

Generic Name: EER28/34

## Mechanical Specifications

Weight: 32.000 (g)

## Part Type Information

EER25.5/18, EER28/28, EER28/34, EER35/42, EER40/46, EER42/44, EER49/54

EER cores, similar to ETD cores, have been designed to make optimum use of a given volume of ferrite material for maximum throughput power. The structure, which includes a round center post, approaches a nearly uniform cross-sectional area that minimizes winding losses.

- EER cores can be supplied with the centerpost gapped to a mechanical dimension.
- EER cores can also be supplied to an AL value, these would be supplied in sets.



## Mechanical Specifications

| Dim | mm    | mm<br>tol | nominal<br>inch | inch<br>misc. |
|-----|-------|-----------|-----------------|---------------|
| A   | 28.50 | ± 0.6     | 1.122           | -             |
| B   | 16.90 | ± 0.2     | 0.665           | -             |
| C   | 11.40 | ± 0.3     | 0.449           | -             |
| D   | 12.50 | ± 0.2     | 0.492           | -             |
| E   | 21.20 | min       | 0.835           | min           |
| F   | 9.90  | ± 0.3     | 0.390           | -             |
| G   | -     | -         | -               | -             |
| H   | -     | -         | -               | -             |
| J   | -     | -         | -               | -             |
| K   | -     | -         | -               | -             |

## Electrical Specifications

| Typical Impedance ( $\Omega$ ) |  |
|--------------------------------|--|
|                                |  |

| Electrical Properties            |           |
|----------------------------------|-----------|
| $A_L$ (nH)                       | 2710 ±25% |
| $A_e$ (cm <sup>2</sup> )         | 0.85200   |
| $\Sigma I/A$ (cm <sup>-1</sup> ) | 8.70      |
| $l_e$ (cm)                       | 7.44      |
| $V_e$ (cm <sup>3</sup> )         | 6.33700   |
| $A_{min}$ (cm <sup>2</sup> )     | .770      |

### Legend

+ Test frequency

Preferred parts, the suggested choice for new designs, have shorter lead times and are more readily available.

The column H(Oe) gives for each bead the calculated dc bias field in oersted for 1 turn and 1 ampere direct current. The actual dc H field in the application is this value of H times the actual NI (ampere-turn) product. For the effect of the dc bias on the impedance of the bead material, see figures 18-23 in the application note How to choose Ferrite Components for EMI Suppression.

A ½ turn is defined as a single pass through a hole.

$\Sigma I/A$  - Core Constant

$A_e$  - Effective Cross-Sectional Area

$A_L$  - Inductance Factor ( $\frac{L}{N^2}$ )

N/AWG - Number of Turns/Wire Size for Test Coil

$l_e$  - Effective Path Length

$V_e$  - Effective Core Volume

NI - Value of dc Ampere-turns

## Land Patterns

| V | W<br>ref | X | Y | Z |
|---|----------|---|---|---|
| - | -        | - | - | - |
| - | -        | - | - | - |

## Winding Information

| Turns<br>Tested | Wire<br>Size | 1st Wire<br>Length | 2nd Wire<br>Length |
|-----------------|--------------|--------------------|--------------------|
| -               | -            | -                  | -                  |

## Reel Information

| Tape Width<br>mm | Pitch<br>mm | Parts 7 "<br>Reel | Parts 13 "<br>Reel | Parts 14 "<br>Reel |
|------------------|-------------|-------------------|--------------------|--------------------|
| -                | -           | -                 | -                  | -                  |

## Package Size

| Pkg Size |
|----------|
| -<br>(-) |

## Connector Plate

| # Holes | # Rows |
|---------|--------|
| -       | -      |