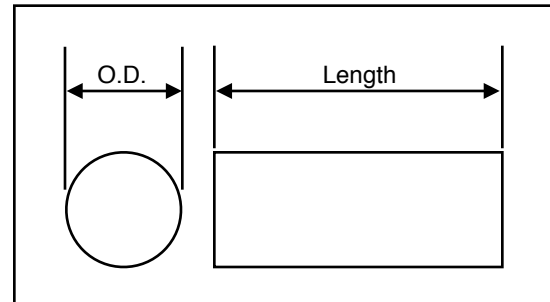
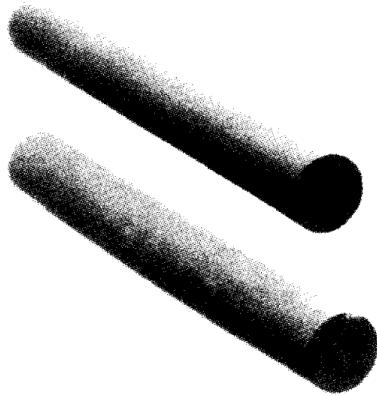


FERRITE RODS, BARS, PLATES, AND TUBES

Ferrite rods, bars, plates and tubes are primarily used in radio antennas and chokes. they are available in materials from permeability of 20 to 10,000.

However, only rods with #61 ($\mu_i = 125$), and #33 ($\mu_i = 600$) materials are standard stocking items. All other materials are custom manufactured, but readily available with lead time for delivery.



Standard Stocking Rods

Part number	Material	Permeability	Diameter (in.)	Length (in.)	A_L value mh/1000 t	Ampere turns
R61-025-400	61	125	0.25	4.0	26	110
R61-037-300	61	125	0.37	3.0	32	185
R61-050-400	61	125	0.50	4.0	43	575
R61-050-750	61	125	0.50	7.5	49	260
R33-037-400	33	600	0.37	4.0	62	290
R33-050-200	33	600	0.50	2.0	51	465
R33-050-400	33	600	0.50	4.0	59	300
R33-050-750	33	600	0.50	7.5	70	200

Other Dimensions and materials are available. Please call for your other requirements.

FERRITE RODS are available as standard stocking item in various sizes in the #33 and #61 materials. Ferrite rods of other materials are available with lead time. The most common use of a ferrite rods is for antennas and choke applications.

ANTENNAS: Ferrite Rods are widely used as loop antenna such as broadcast-band receivers, direction-finder receivers, etc. The #61 material rods are widely used for commercial AM (550 KHz to 1600 KHz) radio antenna and by radio amateurs (2 MHz to 30 MHz). The #33 material rods are more suitable for very low frequency range (100 KHz to 1 MHz). The table on next page lists the recommended frequency range for a few different materials.

To calculate the inductance or number of turns, please use the formula below:

$$N = 1000 \sqrt{\frac{\text{desired } 'L' (mh)}{A_L}}$$

N = number of turns

$$L(mh) = \frac{A_L \times N^2}{1,000,000}$$

L = inductance (mh)

$$A_L (mh) = \frac{1,000,000 \times 'L'(mh)}{N^2}$$

A_L = inductance index (mh/1000 turns)