

- **Control Area Networks (CAN)**– two wire control data bus; engine control modules; electric drivetrain; chassis; drive-by-wire
- **Safety Systems** – air bags; passenger occupancy detection; anti-lock brakes; remote tire pressure sensing; safety control module; drowsiness monitors
- **Security Systems** – telematic navigation; remote and passive keyless entry
- **DC motors** – cooling fan; windshield wipers; power seats, windows, mirrors, sun roof, antenna, etc.
- **Miscellaneous** – active suspension; power supplies; instrumentation; entertainment systems; speed sensors; moisture sensing wipers



Laird Technologies' Rods

Laird Technologies offers an extensive range of rod sizes in three standard ferrite materials.

Features:

Standard sizes and materials to cover the gamut of automotive requirements. Custom sizes can be tooled quickly. Custom features such as slotted or notched ends can be produced. Standard materials available for ferrite rods include Laird Technologies' 55 and 28 (250 and 850 perm).

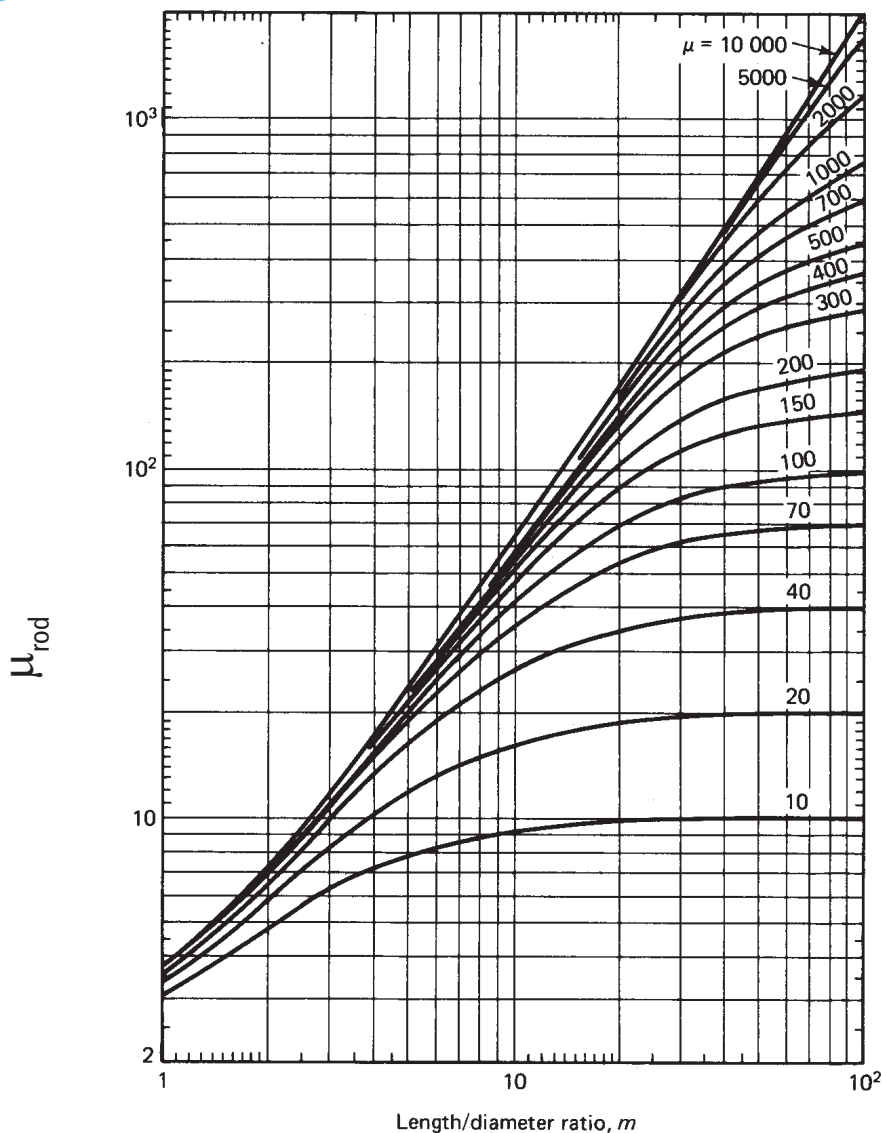
Applications:

EMI suppression for spark ignition coils and DC motors. RFID coils for passive keyless entry. Transmitter/receiver antenna for remote.

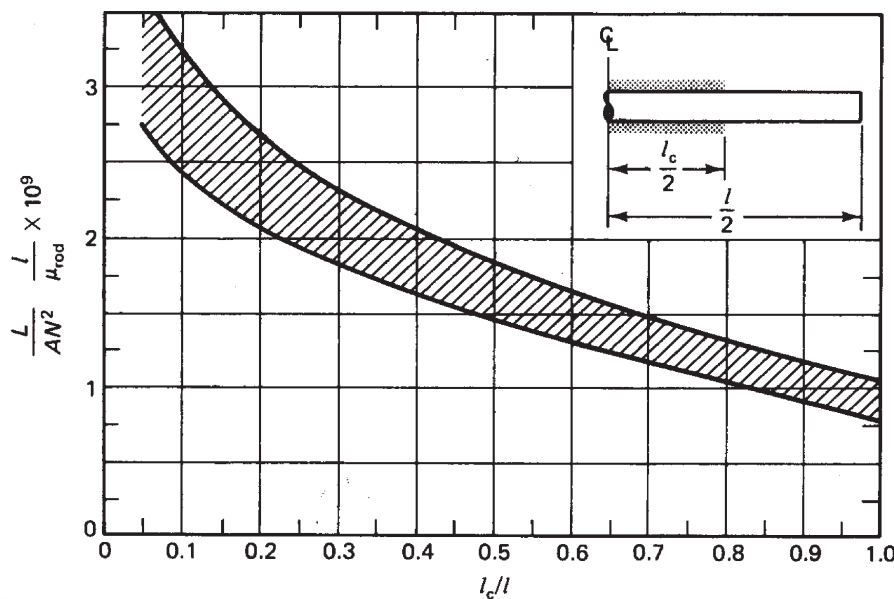
Part Number	Part OD mm (inches)	Length Range mm (inches)
__M0079-X00	2.00 (0.079)	12.00 (0.472)
__M0087-X00	2.40 (0.094)	8.0 - 20.0 (0.315 - 0.787)
__M0099-X00	2.50 (0.099)	8.0 - 16.0 (0.315 - 0.630)
__M0110-X00	2.80 (0.110)	8.0 - 20.0 (0.315 - 0.787)
__M0118-X00	3.00 (0.118)	8.0 - 20.0 (0.315 - 0.787)
__M0150-X00	3.30 (0.150)	8.0 - 20.0 (0.315 - 0.787)
__M0130-X00	3.85 (0.152)	8.0 - 30.0 (0.315 - 1.181)
__M0158-X00	4.00 (0.158)	10.0 - 25.0 (0.394 - 0.984)

Part Number	Part OD mm (inches)	Length Range mm (inches)
__M0185-X00	4.70 (0.185)	10.0 - 20.0 (0.394 - 0.787)
__M0197-X00	5.00 (0.197)	7.0 - 30.0 (0.275 - 1.181)
__M0209-X00	5.30 (0.209)	7.0 - 20.0 (0.275 - 0.787)
__M0236-X00	6.00 (0.236)	15.0 - 30.0 (0.591 - 1.181)
__M0250-X00	6.35 (0.250)	15.0 - 35.0 (0.591 - 1.378)
__M0256-X00	6.50 (0.256)	15.0 - 30.0 (0.591 - 1.181)
__M0315-X00	8.00 (0.315)	15.0 - 35.0 (0.591 - 1.378)
__M0394-XX0	10.00 (0.394)	15.0 - 40.0 (0.591 - 1.575)

Partial list of standard rod sizes.



μ_{rod} as a function of m with material permeability as a parameter



$L/AN^2\mu_{rod}$ as a function of l_c/l . The results for a wide variety of ferrite rods are contained within the shaded area (dimensions in mm, L in H)