

Description

This target functions with a number of different resonant inductive sensors from CambridgeIC, including 10mm wide Type 1 Linear Sensors. Sensors measure the relative position of the target without mechanical or electrical contact.

The 11mm E-Core Target has a resonant circuit inside, comprising a wound E-Core inductor connected to a capacitor mounted to its rear. These form a high Q resonant circuit that is inductively coupled to the sensor.

Features

- Small form factor

Applications

- 10mm Type 1 Linear Sensors, 25mm to 300mm

Product identification	
Part no.	Description
013-1020	11mm E-Core Target

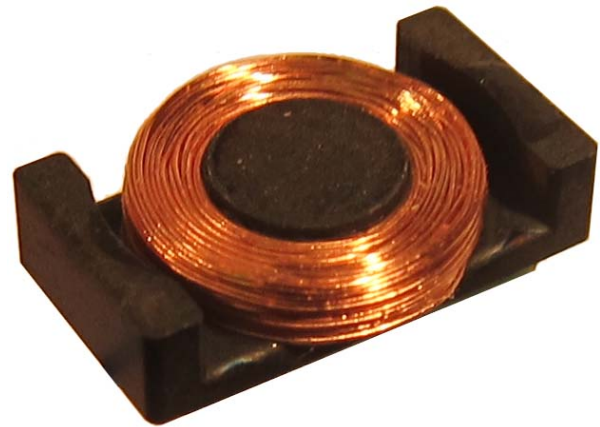


Figure 1 C Target viewed from Sensor Side

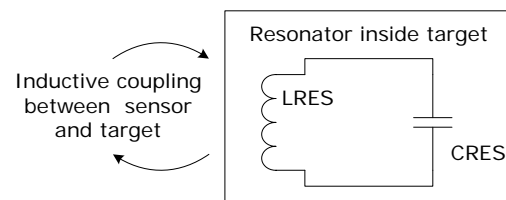


Figure 2 Equivalent circuit

1 Mechanical

Figure 4 illustrates the 11mm E-Core Target, and includes key dimensions.

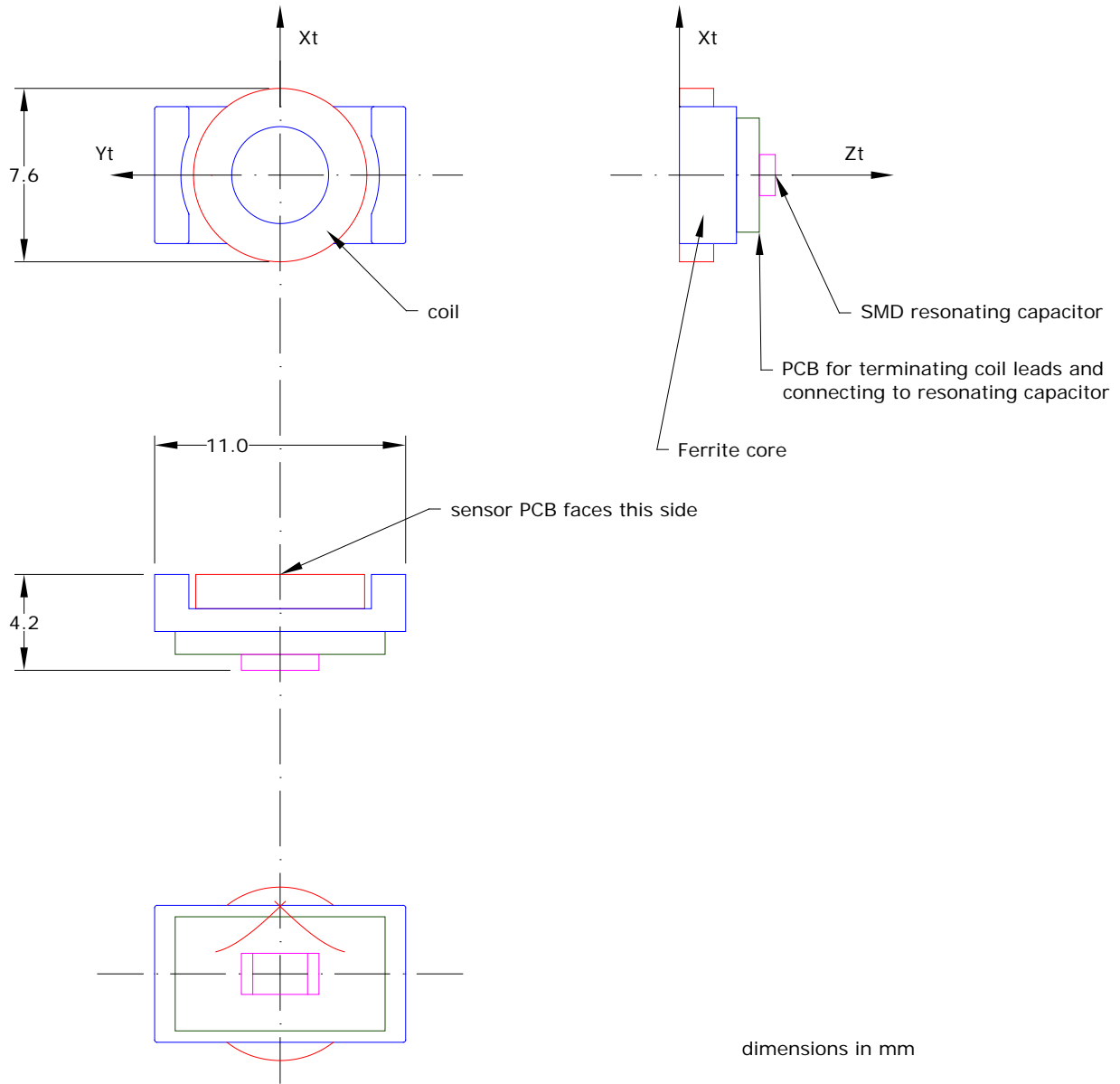


Figure 3 Mechanical drawing of 11mm E-Core Target

2 Specifications

2.1 Electrical

Table 1 Electrical specifications

Part No	013-1020
Item	Value
Resonator frequency	187.5kHz
Tolerance at 20°C	±4%
Max change in resonant frequency across Operating Temperature Range relative to value at 20°C	±1%

2.2 Environmental

Table 2 Environmental Specifications

Item	Value
Maximum Operating Temperature	+85°C
Minimum Operating Temperature	-40°C

2.3 Physical

Table 3 Physical specifications

Item	Value
Mass, typical	0.8g

3 Document History

Revision	Date	Description
0001	15 October 2014	First draft, basic information

4 Contact Information

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5 Legal

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