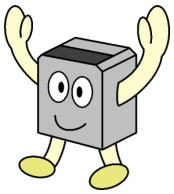
Tips for COIL users (1)



Introduction

We often hear that "Coil is very difficult to understand in electrical components". Indeed, even we, coil manufacturer, also feel the coils are complicated compared with other passive components, resistors (R) or capacitors (C).
So, from a viewpoint of the coil manufacturer we are going to serialize the "Tips for Coil users" to encourage you to understand and use coils more.
The schedule is total of 12 times biweekly.
We hope this helps to all of the coil users.

What is a difference between coils and inductors.

We SAGAMI call components with a wire wound up in spiral "coils". Among them, the coils that have single winding are identified as "inductors".

However, we also call "products that has two or more inductors in structure" "inductors". When we describe in figure, coils include inductors, transformers, filters and others as Figure 2. There are no particular rules in the industry but such names as "Inductive components", "Transformers" or "Inductors" are used in the international standards (IEC), rather than coils.
Of course, it is all right to call inductors coils.
For your information, if we are asked a nature of business, we would answer “we are coil manufacturer!”

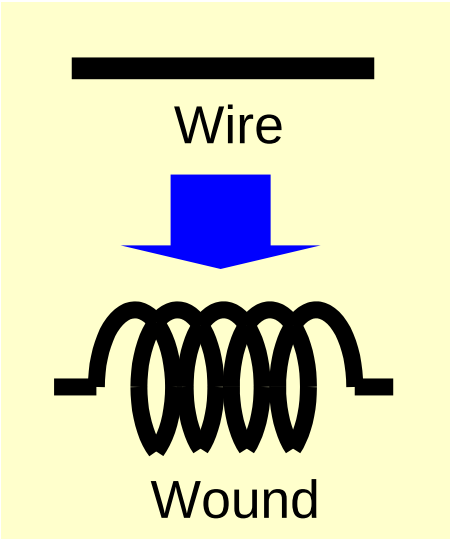


Fig. 1

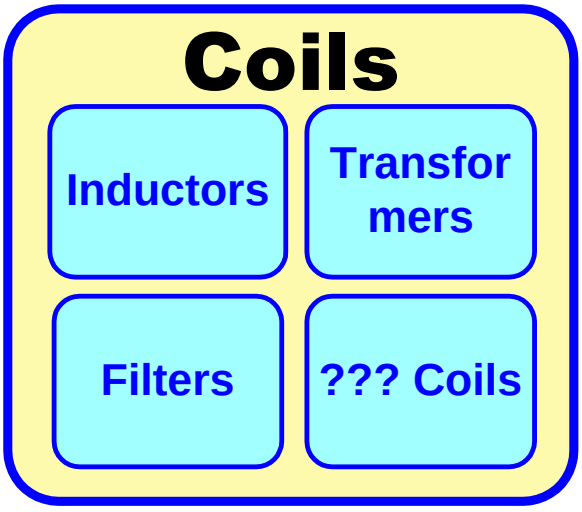


Fig. 2

When you request samples, please do not hesitate to tell us just "COILS". Then we can absolutely understand your request.

For your reference, coils are described in JIS C5602 "Glossary of Passive Components for Electronic Equipment" that "coil: in general, a component which has a structure of a conductor wound around an insulator, and has a self-inductance".

Why do coils have different names though they have similar appearance?
Like other components, some product names come from their "materials", and some come from "electrical characteristics" or “applications”. Most of capacitors are called after their "materials", while coils are called after both of them.
In the most cases, the materials used for capacitors are related to the applications while it is not necessarily the case for coils. Even when it is called as ~~an~~ "inductors for xxxx", it is very rare case that it must be used only for the particular application.
Especially in the case of a coil optimized for its particular application, we may call it ~~a~~ "coils for xxxx" to emphasize the application and appeal it to our customers.
Conversely, we may use "coils for xxxx" designated by our customers as the components name.

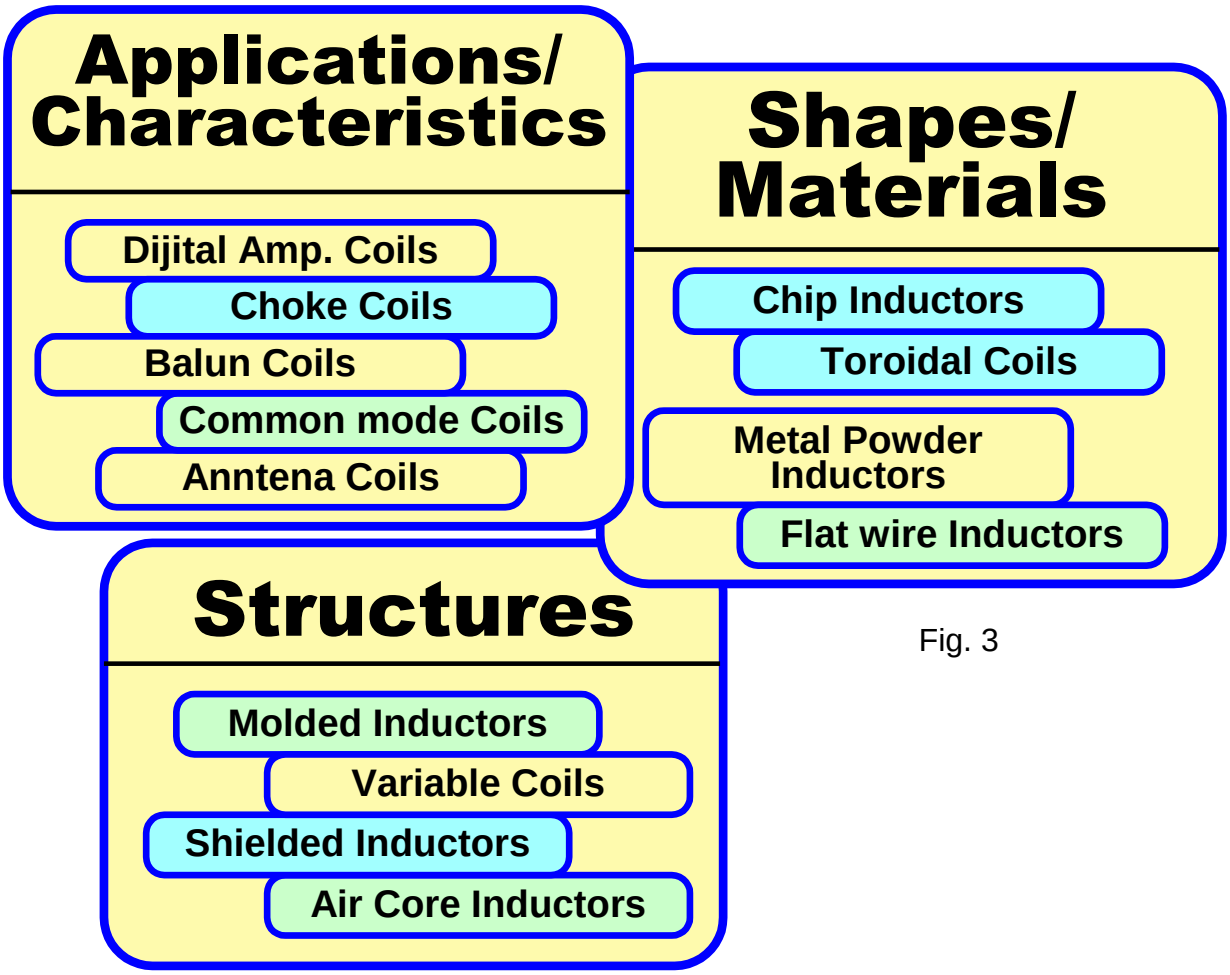


Fig. 3

We understand that it is difficult to identify coils because each company has different forms and names of them.
Please just refer to the specifications of coils regardless of their name.
If characteristics meet your requirements, it could be used for your request.
Please feel free to contact us whenever you need us.

Y.Hoshino