

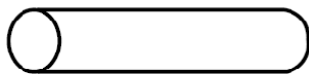
## DEFINITION OF TERMINOLOGY

### ■ SLUG CORE(彈丸形鐵芯)

A core with the shape of a cylindrical rod. Slug cores typically refer to cores with no leads. Axial leaded slug cores are also very common. Non-leaded slug cores are typically used in power filtering applications. They exhibit higher flux density characteristics than other core shapes as most of the magnetic energy is stored in the air around the core. (Also see Axial Inductors and Radial Inductors.)

指具圓柱體外形的鐵芯，彈丸形鐵芯通常指沒有導線的鐵芯，但軸向有導線的彈丸形鐵芯亦很常見，無導線的彈丸形鐵芯通常用於電源濾波的應用，比起其他形狀的鐵芯，彈丸形鐵芯因將絕大部份之磁能儲存在鐵芯附近的空間，故其具有較高的磁通密度。

Slug Cores



Non - Leaded

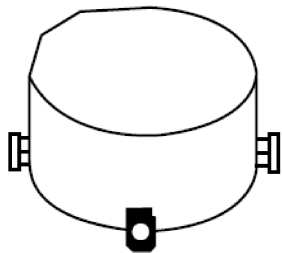


Leaded

### ■ TOROIDAL INDUCTOR(環形電感)

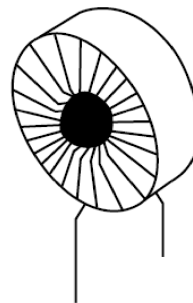
An inductor constructed by placing a winding(s) on a core that was a donut shapes surface. Toroidal cores are available in many magnetic core materials within the four basic types: Ferrite, Powdered Iron, Alloy and High Flux and Tape Wound. Characteristics of toroidal inductors include: self shielding (closed magnetic path), efficient energy transfer, high coupling between windings and early saturation.

一電感其繞線纏繞於一形如甜甜圈的鐵芯上，環形鐵芯有多種材質可供選擇，基本上有四類：鐵氧磁體，粉狀鐵，合金及高磁通且帶封型，環型電感的特性包括：閉磁性(封閉的磁路)，高效率的能量轉換，線圈間的高耦合及快速飽和。



Surface Mount

Toroidal Inductors



Through Hole

### ■ TEST FREQUENCY(測試頻率)

The frequency at which inductors are tested for either inductance or Q or both. Some test frequencies used widely in the industry include: 用以測量一電感之電感值或品質係數或兩者之頻率，工業上常使用的測試頻率包括：

COMMON TEST FREQUENCIES 常用之測試頻率	
TEST FREQUENCY 測試頻率	INDUCTOR/VALUE MEASURED 電感/量測值
1 KHz	Power Inductors 功率電感(測量範圍大)(wide Value Range)
0.079MHz	RF Inductors 射頻電感(above 10,000 $\mu$ H to 100,000 $\mu$ H)
0.250MHz	RF Inductors 射頻電感(above 1,000 $\mu$ H to 10,000 $\mu$ H)
0.790MHz	RF Inductors 射頻電感(above 100 $\mu$ H to 1,000 $\mu$ H)
2.5MHz	RF Inductors 射頻電感(above 10 $\mu$ H to 100 $\mu$ H)
7.9MHz	RF Inductors 射頻電感(above 1 $\mu$ H to 10 $\mu$ H)
25MHz	RF Inductors 射頻電感(above 0.10 $\mu$ H to 1 $\mu$ H)
50MHz	RF Inductors 射頻電感(above 0.01 $\mu$ H to 0.1 $\mu$ H)

Most of these test frequencies have been designated by military specifications. However, there are some conflicting frequency assignments among the military specifications. There is a present trend to assign test frequencies that match the user frequencies. This is particularly true for very low values. These user frequencies do not match those listed above.

大部分的這些測試頻率是依軍規所定制的，然而有些測試頻率仍和軍規有些抵觸，現今的趨勢是依使用者頻率作為測試頻率，特別是對低感值的電感，這些使用者頻率並不符合上列的表單內的頻率。

### ■ TEMPERATURE RISE(溫升)

The increase in surface temperature of a component in air due to the power dissipation in the component. The power dissipation for an inductor includes both copper and core losses.

在被測量元件所存在的環境溫度之其表面溫度因元件內部能量的釋放所造成溫度的增加量。

### ■ STORAGE TEMPERATURE RANGE(儲存溫度範圍)

Range of ambient temperatures over which a component can be store safely. (Also see Operating temperature Range.)

指一環境溫度範圍，元件在此溫度範圍可被安全儲存。(亦參閱操作溫度範圍)