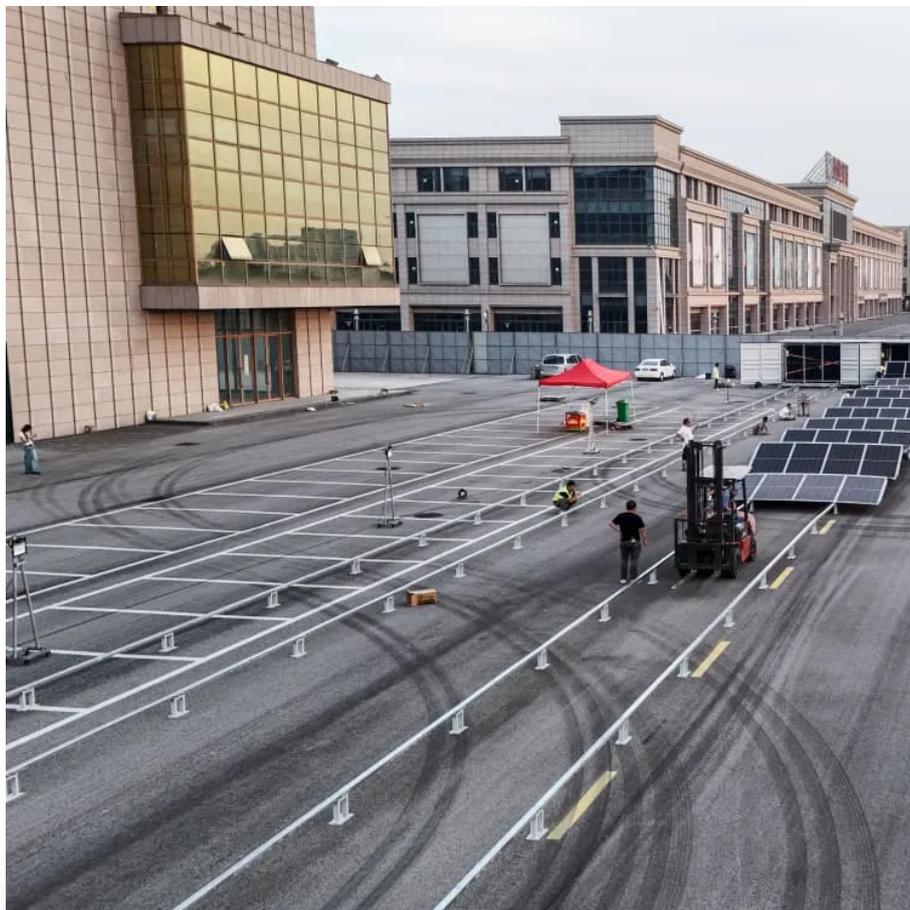


How to measure the inductance of base station power supply





Overview

Inductance is usually measured in units called millihenrys or microhenrys. It is commonly measured by using a frequency generator and an oscilloscope or an LCM multimeter. Why is inductor current measured in a switched-mode power supply?

This happens when an inductor is selected that does not have enough current rating for a given application. One of the main reasons for measuring inductor current in a switched-mode power supply is so that one can recognize whether the inductor was properly selected or whether inductor saturation will occur in operation or during a fault condition.

What is the measurement of inductance?

In this section, we will discuss the measurement of inductance, which is a fundamental property of electrical circuits. Inductance is a measure of an object's ability to store electrical energy in a magnetic field, and it is expressed in henries (H).

Why is inductance measurement important?

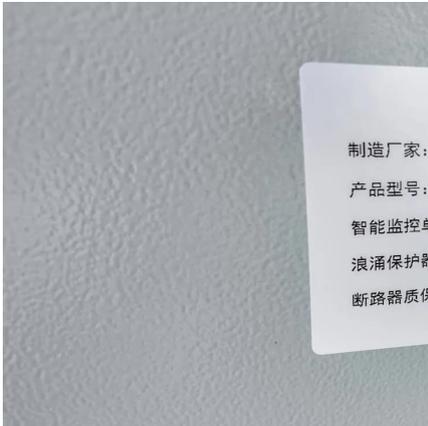
Inductance measurement is essential in many areas of electrical engineering, including power transmission, signal processing, and electronic circuit design. Inductance measurement can be challenging due to various factors, including stray inductance, parasitic inductance, and measurement instrument limitations. 3.3.2. Inductors.

Why is accurate DC biased inductor measurement important?

Accurate DC biased inductor measurements are important in power electronics. The most important component in a switching power supply is its power inductor. A power inductor has high permeability core around which the windings are wound. It saturates when the current flowing through the conductors is larger than i



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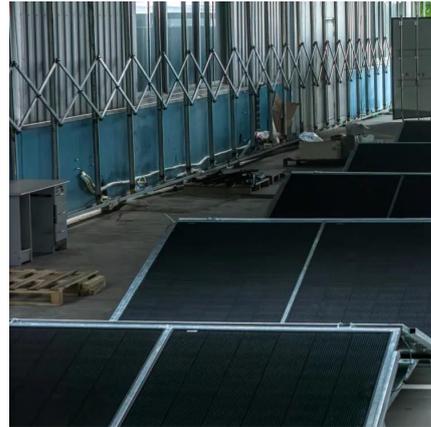
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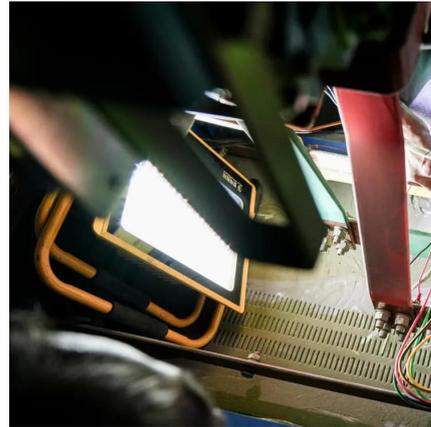
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Overview
Using a Resistor to Determine Inductance
Measuring with an LCR Meter
Calculating Inductance on a Voltage-Current Slope
Calculating Inductance on a Voltage Current Slope
Inductance is the ability of a coil to stop an electrical current from flowing through it. An inductor coil can stop one current so a different one is able to flow. TVs and radios, for instance, use inductance to receive and tune into different channels. Inductance is usually measured in units called millihenrys or microhenrys. It is commonly measu See more on wikipedi analog



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In the evaluation of these power supplies, it is often useful to measure the inductor current to gain a complete picture of the voltage conversion ...

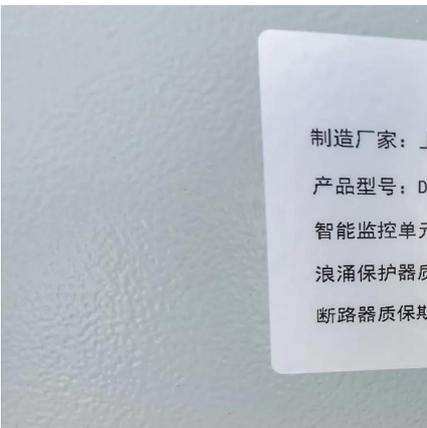


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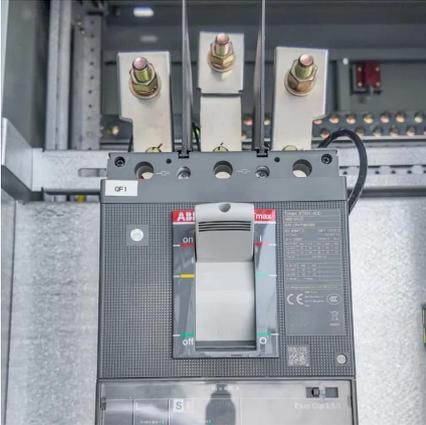
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