

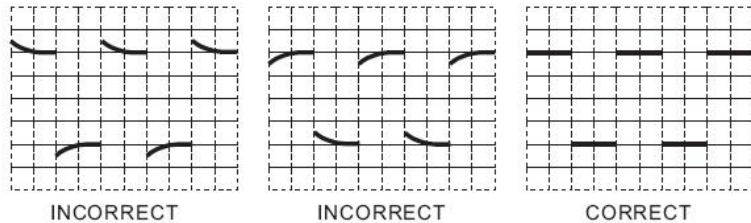
## INTRODUCTION

ZP1050A passive high impedance oscilloscope probe can be used on the oscilloscope with an input impedance of 1M (15pF capacitor is connected in parallel). Through compensation, it may be used with the oscilloscope with an input capacitance of 10-35pF. The attenuation of probe is fixed to  $\times 10$ , the oscilloscope can recognize the attenuation ratio of the probe automatically.

## PROBE COMPENSATION

Due to the difference in the input characteristics of each oscilloscope, the probe should be adjusted for low-frequency compensation when it is moved from one oscilloscope to another oscilloscope. To ensure accurate result, the probe should be adjusted before use. The probe is adjusted as follows:

- 1、 Connect the probe with the oscilloscope properly, connect the hook tip with the calibration signal on the front panel of oscilloscope, and connect the probe ground to the signal ground on the front panel of oscilloscope.
- 2、 Set the oscilloscope to display 2~3 cycles and 2~6 vertical divisions.
- 3、 Carefully adjust the trimmer tool to obtain the flattest tops to the square waves displayed on this oscilloscope, see follow illustrations.



CAUTION symbol indicates a hazard. Improper handling or execution can lead to loss of important data or damage to the instrument.

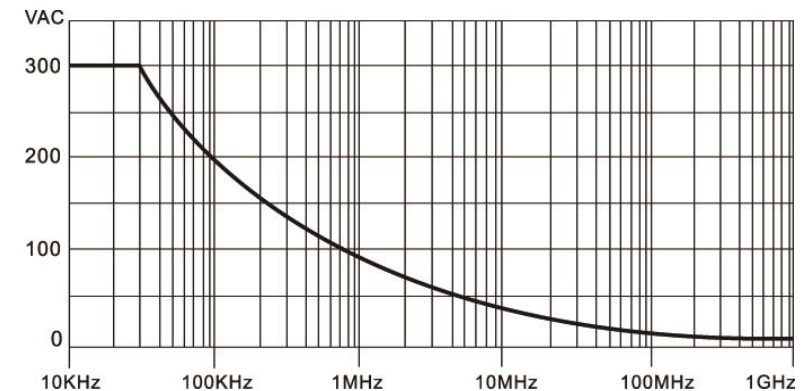
**Measurement Category CAT II:** It is applicable to measure for circuits directly connected to the low-voltage device.

**Cleaning:** Cut off power supply; Use a damp but not dripping soft cloth (with a mild detergent or water) to wipe the dust outside the instrument.

## SPECIFICATIONS

Bandwidth(-3 dB)	DC-500MHz
Rise time(10% - 90%)	700 ps
Attenuation ratio	10:1 (fixed)
Input resistance	10M $\Omega$ $\pm$ 2% (when terminated into 1 M $\Omega$ )
Input capacitance	11pF $\pm$ 2 pF
Maximum input voltage	300VRMS CAT II
Scope compensation range	10-35 pF
Safety	Conformed IEC/EN 61010-031,1st edition
Cable length	130 $\pm$ 2cm
Operating Temperature	0 to 50 $^{\circ}$ C, 0 to 80% RH
Storage Temperature	-20 to 60 $^{\circ}$ C, 0 to 90% RH
Altitude	Less than 3000m (operating), less than 12000m (non-operating)
Contaminated degree	2

## VOLTAGE DERATING CURVE



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**ZYMI**

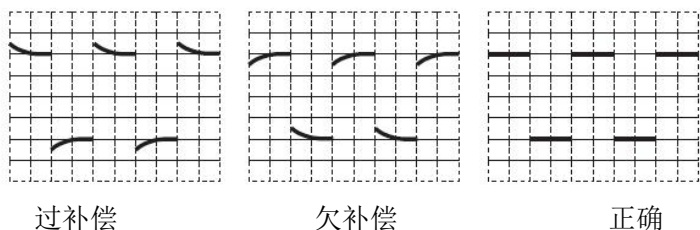
## 简介

ZP1050A 无源高阻抗示波器探头可在输入阻抗为  $1M\Omega$  (并联  $15pF$  的电容) 的示波器上使用。通过补偿, 它还可以用在  $10-35pF$  输入电容的示波器上。探头设计为固定 10 倍衰减, 示波器可自动识别探头的衰减比例。

## 探头补偿

由于示波器输入特性的差异, 当探头从一台示波器上移动到另一台示波器上以后, 探头的低频补偿可能需要调整。为保证测量结果的准确性, 探头使用应遵循“先调整, 后使用”的原则。调整的步骤如下:

- 1、探头正常连接示波器, 探钩接到示波器前面板的校准信号上, 探头的地线接到示波器前面板的信号地上;
- 2、调节示波器, 使屏幕上显示 2~3 个信号周期且信号所占垂直刻度为 2~6 格;
- 3、通过调节棒调整探头补偿盒, 直到您在显示器上看到一个完美的平顶方波, 如下图所示。



警告符号表示存在危险。用户操作时, 如果不按照说明书的要求操作, 则可能对产品造成损坏或者丢失重要数据。

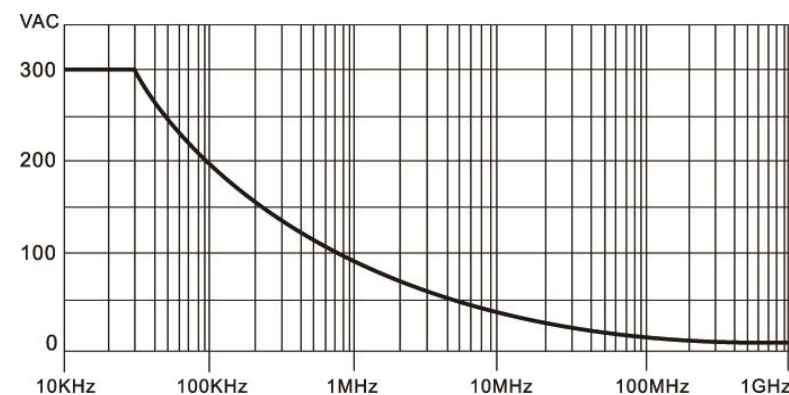
**测量类别 CAT II:** 为适用于在直接与低压设施连接的电路上进行的测量。

**清洁方法:** 断开电源; 用潮湿但不滴水的软布 (可使用柔和的清洁剂或清水) 擦拭探头外部的浮尘。

## 技术参数

带宽(-3 dB)	DC-500MHz
上升时间(10% - 90%)	700 ps
衰减比	10:1 (固定)
输入阻抗 (端接到 $1M\Omega$ 时)	$10M\Omega \pm 2\%$
输入电容	$11pF \pm 2pF$
最大输入电压	300VRMS CAT II
示波器补偿范围	10-35 pF
安全性	符合 IEC/EN 61010-031,1st edition
电缆长度	$130 \pm 2cm$
操作环境	0 至 $50^{\circ}C$ , 0 至 80% RH
存储环境	$-20$ 至 $60^{\circ}C$ , 0 至 90% RH
海拔高度	操作 3000 米以下、非操作 12000 米以下
污染等级	2

## 电压降额曲线



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**ZTMI**