Voltage Derating Curve

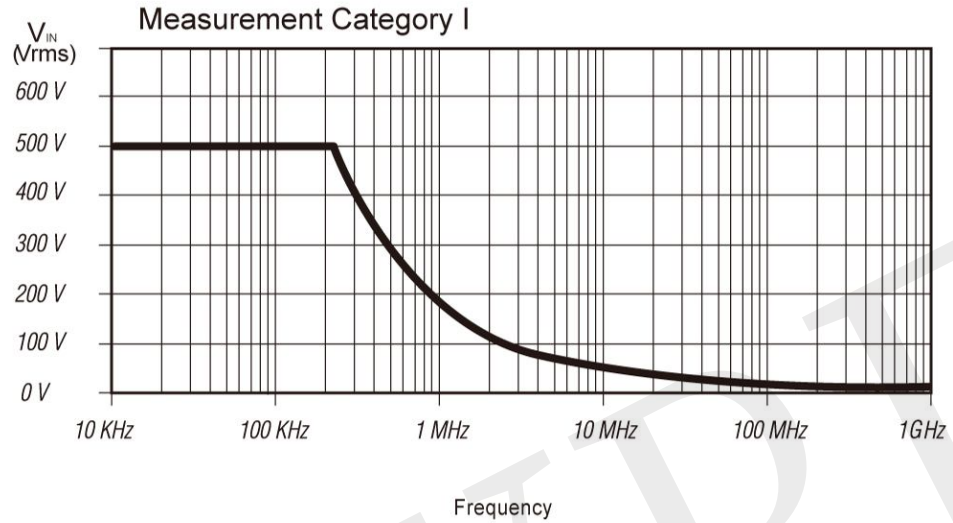


Fig.1

Made in Taiwan
Version:HF-J0201B

Oscilloscope Probe Kit
Model. P6251

Introduction

The P6251 is a passive high impedance oscilloscope probe designed and calibrated for use with instruments having an input impedance of 1MΩ shunted by 20pF. However, it may be compensated for use with instruments having an input capacitance of 10 to 30pF.
The probe incorporates a two position slide switch in the head which selects attenuation of x1, x10 position.

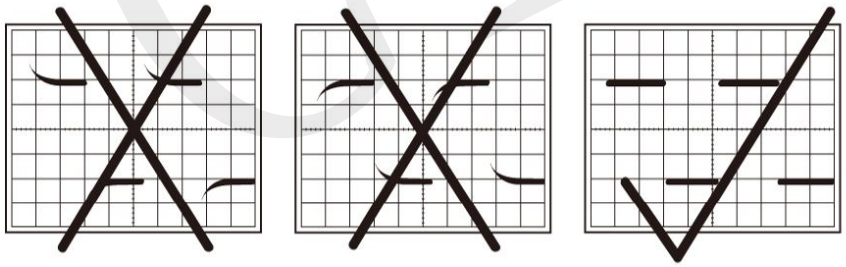
Safety Instructions

Review the following safety precautions to avoid injury and prevent damage to this product or any products connected to it.

- To avoid potential hazards, use this product only as specified.
- The common terminal is at ground potential. Do not connect the common terminal to elevated voltages.
- Do not operate in an explosive atmosphere.
- Keep product surfaces clean and dry.
- If your probe requires cleaning, disconnect it from the instrument and clean it with mild detergent and water. Make sure the probe is completely dry before reconnecting it to the instrument.

Compensation Adjustment

The following adjustment is required whenever the probe is transferred from one oscilloscope or input channel to another. Connect the probe to the oscilloscope and select x10 position on the probe switch. Apply a 1KHz square wave to the probe tip, or connect to the cal socket on the oscilloscope to display a few cycles of the waveform and adjust the trimmer located in the BNC box for a flat topped square wave.



Specifications

Position X10	
Attenuation Ratio	10:1
Bandwidth	DC to 250MHz
Rise Time	1.4nS
Input Resistance	10MΩ when used with oscilloscopes which have 1MΩ input.
Input Capacitance	Approx. 13pF
Compensation Range	10 to 30pF
Max. Input Voltage	Measurement Category Ⅰ: 500 Vrms (see voltage derating curve on Fig.1) Measurement Category Ⅱ: 400 Vrms
Position X1	
Attenuation Ratio	1:1
Bandwidth	DC to 6MHz
Rise Time	58nS
Input Resistance	1MΩ (oscilloscope input resistance)
Input Capacitance	65pF plus oscilloscope capacitance.
Max. Input Voltage	Measurement Category Ⅰ: 150 Vrms Measurement Category Ⅱ: 150 Vrms
Operating Temperature	0°C to 50°C
Humidity	85% RH or less (at 35°C)
Safety	Meets EN61010-031 CAT Ⅱ
Cable Length	1.2 Meter

Accessories

Description	Part No.
Channel Identifier Clip	PA-105
Sprung Hook	PA-106
Ground Lead	PA-107
Insulating Tip	PA-108
Measuring Tip	PA-102A
IC Tip	PF-902
Adjusting Tool	PF-903
Sprung Earth Tip	PF-905A
BNC Adapter	PF-901