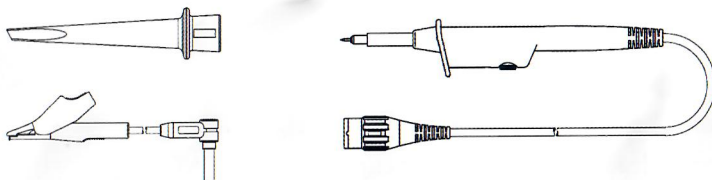


PB830 Scope Probe 10:1

Operating Instructions

This scope probe is designed for use with handheld digital oscilloscope.



Symbols



600 V CAT III

Refer to instrument user's guide for additional safety Information.

Category III 600V Over voltage Protection. Refer to instrument user's guide for additional information.

Ratings

The voltage rating and measurement category rating marked on the probe as Sembly are the maximum voltage and measurement category for the probe itself. The voltage rating and measurement category of the measuring instrument used with the probes might be lower. Refer to instrument user's guide to ensure that no excessive voltage is applied or measurement in excessive measurement Categories is made.

Scope probe 10:1 — 600V CAT III

Hook clip for probe tip — 1000V CAT II, 600V CAT III

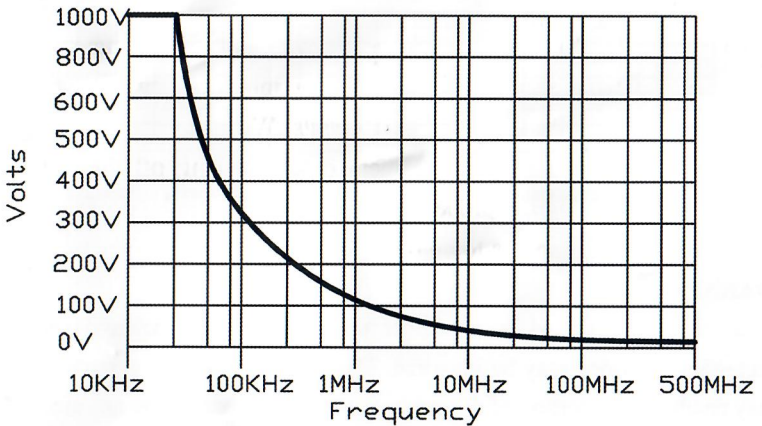
Ground lead with mini alligator clip — 1000V CAT II

Operation

The test probe 10:1 can be used together with any test instrument that has an Input impedance of $1M\Omega$ and whose input capacity is within the compensation Range (see technical details). When connecting the probe, always connect to the test instrument before picking off the test signal. When disconnecting the probe, first disconnect the probe tip from the test signal. The hook clip has to be pushed into the probe tip. The ground lead has to be plugged into the probe body.

Technical Details

Dividing ratio	: 10:1
Input capacitance	: 16pF
Compensation range	: 10pF-20pF
Frequency range	: 0—300MHz
Rise time	: $\leq 1\text{ns}$
Lead length	: 140cm
Input resistance	: $10\text{M}\Omega \pm 1\%$
Rated voltage when using touch-protected	
Test equipment	: 1000VCAT II, 600VCAT III (frequency-dependent, see derating curve below)

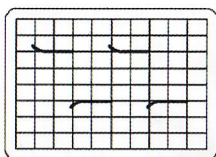


Making a Reference Connection

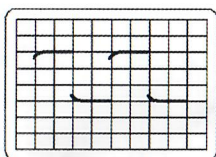
The output signal always relates to a reference point. For optimum measuring accuracy. The shield of the test probes should be connected to this reference point by the shortest possible route

Compensation

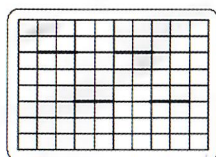
For an accurate indication of the measuring signal. It is necessary to adjust the capacity of the probe to the input capacity of the oscilloscope. For this purpose the probe has an adjustment screw in the handling section. Connect the probe to the oscilloscope and the tip to the reference calibration signal of the oscilloscope. Turn the adjustment screw until the oscilloscope shows an exact square wave.



Under compensated



Over compensated



Properly compensated

WARNING:

If scope probe is used in a manner not specified by Technologies. The protection provided may be impaired. Instrument damage or personal injury may result. If any portion of this probe is worn or damaged. Do not use.