7 Specifications

NOMINAL CHARACTERISTICS

Nominal characteristics describe parameters and attributes which are guaranteed by design, but do not have associated tolerances.



Maximum Continuous Input 15 Amp peak

Current Refer to figure 7-1, Input current

vs. frequency.

Maximum Peak Current 30 Amp peak,

50 Amp at pulse width of

< 10 µsec.

Insertion Impedance Refer to figure 7-2

Intended Output Load 1 $M\Omega$

Maximum Permitted

300 V, CAT I (Insulated conduc-

Circuit Voltage

WARRANTED CHARACTERISTICS

Guaranteed at 23° C ± 3° C (73° F ± 5° F) after power has been

tor).

applied for 30 minutes.

Low Frequency Accuracy \pm 1% of reading \pm 1 mV.

TYPICAL CHARACTERISTICS

Sensitivity 20 mA/div to 10 A/div.

Output voltage 0.1 V/A

Sensitivity Temperature $\pm 2\%$ or less. (from 0° to ± 40 ° C,

Coefficient 32° F to 104° F).

Noise Equivalent to 2.5 mA rms or less

(Bandwidth of measuring instru-

ment: 20 MHz).

Bandwidth DC to 50 MHz.

Rise Time < 7 ns.

ENVIRONMENTAL CHARACTERISTICS



Temperature

Operating 0 to 40° C (32° F to 104° F) at

80% relative humidity.

Storage -10° C to 50° C (14° F to 122° F)

80% relative humidity.

Usage Indoor

Altitude 2000 m (6562 feet)

Effect of External Magnetic

Field

Equivalent to a maximum of 20 mA (In a 60 Hz, 400 A/m

magnetic field).

PHYSICAL CHARACTERISTICS

Dimensions Probe

 Length
 175 mm (6.9 inch)

 Width
 18 mm (0.7 inch)

 Height
 40 mm (1.57 inch)

Dimensions Compensation Box

Length 65 mm (2.6 inch)
Width 39 mm (1.5 inch)
Height 24 mm (0.9 inch)
Weight 210 g (7.4 oz.)

Maximum diameter of 5 mm (0.2 inch)

conductors to be measured

COMPLIANCES AND CERTIFICATIONS

CE Declaration of Conformity

The probe meets requirements of the EMC Directive 89/336/EEC for Electromagnetic Compatibility and Low Voltage Directive 73/23/EEC for Product Safety.

Electromagnetic Emission: EN 55011:1998 Class B Radiated emissions Electromagnetic Immunity: EN 61000-4-2:1995 Electrostatic Discharge

EN 61000-4-3:1996 RF Radiated Electromag-

netic field

* Meets Performance Criteria "B" limits at certain test levels, during the disturbance, product undergoes a temporary degradation or loss of function of performance which is self recoverable.

Low Voltage Directive: EN 61010-1:1993+A2:1995

Safety requirements for electrical equipment for measurement, control and laboratory use.

Part 1: General requirements

Part 2-031: Particular requirements for hand-held probe assemblies for electrical measurement and test Part 2-032: Particular requirements for hand-held cur rent clamps for electrical measuremnt and test

The probe has been qualified to the following

EN 61010-2-031:1994 EN 61010-2-032:1995

Overvoltage Category I (anticipated transient overvol-

tage 1500 V), Pollution Degree2

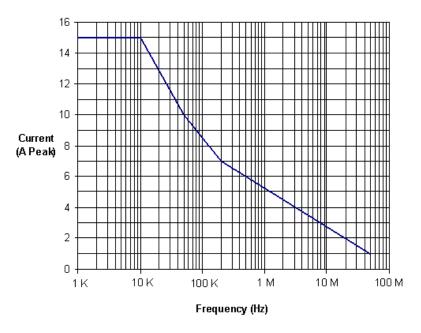


Figure 7-1. Maximum Input Current vs Frequency

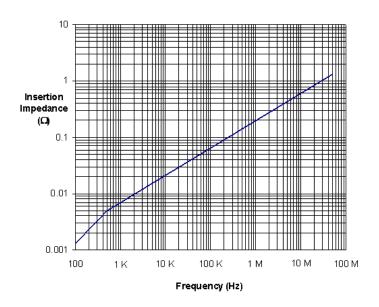


Figure 7-2. Insertion Impedance vs Frequency