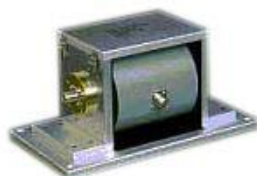


F-120-9A FCC Bulk Current Injection Probe

Datasheet



Introduction

F-120-9A bulk current injection probe is particularly efficient (coupling factor is less than 7 dB). It only takes 20 W of power amplifier to produce 10 V level, which save 4-16 times amplifier power consumption compared with conventional current clamp. Its inner diameter is 40 mm; fully meet the requirement of standard IEC 61000-4-6/ GB/T 17626.6. Radio Frequency electromagnetic fields can degrade the electrical equipment by producing common-mode current on interconnection cables. Through injection common-mode current to the cable of equipment under test, the effect of electrical equipment on E field and H field can be simulated. IEC 61000-4-6/ GB/T 17626.6 has defined the immunity test method of electrical equipment to conductive common-mode current in the range of 150 kHz—230 MHz. In the test of IEC 61000-4-6, it is specified that if the CDN with direct capacitive coupling technique cannot be used, EM-Clamp (electromagnetic clamp) can be used. If the cable under test is short, it is necessary to use current clamp. F-120-9A bulk current injection probe can test unshielded cables shorter than 0.5 m.

Characteristics

- Coupling factor is very small, wide frequency range:
The attenuation from 100 KHz to 230 MHz is less than 7 dB.
- As per standard IEC 61000-4-6, RF power consumption: ≤20 W
Up to 200 w
- Maximum measurable cable diameter:
up to 40 mm

Because of the small coupling factors of F-120-9A, 400%—1600% power consumption of continuous wave amplifier can be saved. When 10 V signals (with modulation) is produced, the necessary power consumption is less than 20 W. With high efficiency, F-120-9A is an ideal device used in any tests as per Military standard or Commercial conduction immunity in the frequency range of 10 kHz—230 MHz.

Technical Indices

- Frequency Range : 10kHz—250MHz
- Inner Diameter: 40mm Outer Diameter: 127mm
- Rated Input Power Consumption: 100 W 【30 min】 ; 200 W 【15 min】

Accessories

- FCC-BCICF-4: Injection Probe Calibration Device-- 10 kHz to 250 MHz
- F-52: Current Probe, 10 kHz— 500 MHz, Inner Diameter 40 mm
- FCC-801-150-50-BCI : Adapter group of 150Ω to 50 Ω is used in current injection testing



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