PCD 122

Coupling Network for Symmetrical Data and Control Lines

Datasheet

HAEFELY

Current and voltage – our passion

General Description

The PCD 122 is used for coupling of 10/700 µs impulses up to 6.6 kV peak onto unshielded symmetrical data and signal lines according IEC/EN and ITU standards. Up to 2 pairs / 4 wires can be tested simultaneously.

To obtain maximum flexibility only coupling elements are included in the PCD 122. Decoupling circuits, which depends on the EUT to be tested, can be placed separately in the test setup.

Manual coupling path switching for common mode (longitudinal, line to earth) and for differential mode (transverse mode, line to line) testing.

Default coupling elements are gas arrestors and breakdown avalanche diodes. The coupling elements can be selected easily. The direct coupling output allows the customer to use his own coupling elements.

The PCD 122 can be used together with the impulse module PIM 120 from the Surge Platform. This provides all the programming functions required to perform IEC, ANSI and EN testing also without the need of a control computer.

Features	Advantages
▪ 10 / 700 µs impulse	☑ **International Application –** Specially designed to meet and exceed the requirements of: IEC / EN 61000-4-5 Edition 1 IEC / EN 61000-4-5 Edition 2 ITU K.44: 2003 Figures A.5-1 and A.6.1-1 to A.6.1-5
▪ Serial resistors included	☑ **Safe and Easy –** All the sockets are safety banana plugs to ensure maximum safety to the user. The selected coupling path can be seen at a glimpse
▪ Up to 4 wires can be tested	☑ **Sturdy and Reliable –** Careful component selection ensures that the PCD 122 will continue to operate under the most strenuous testing regimen
▪ Signal Bandwidth up to > 10 MHz	☑ **Report Generation –** The unit controller can automatically generate test reports without a computer. Add WinFEAT&R control and reporting software on a host PC to collect and collate data in any format you like
▪ Low capacitive load on the EUT lines	
▪ Manual coupling path selection	

Applications

- Unshielded symmetrical data and signal lines
- Telecom equipment
- Other international requirements for 10/700µs impulses on symmetrical operated lines

Scope of Supply

- PCD 122
- cable Fischer - Fischer 1 m
- Cable set
- Short circuit bridges- 5 Nos.
- Users Manual

Technical Data

Device		
Impulse Shape	10 / 700 µs – 5 / 320 µs	
Impulse Amplitude	Max. 6.6 kV	
Serial Resistor	4 x 25 Ω 4 x 50 Ω 4 x 100 Ω	
Coupling Elements	Gas arrestor 90 V Avalanche breakdown diodes (ABDs)	
Voltage on EUT lines	Max. 72 V_{dc} or 50 $V_{ac,RMS}$ Max. 144 V_{dc} or 100 $V_{ac, RMS}$	With gas arrestor as coupling elements With ABDs as coupling elements
Signal Bandwidth	Up to > 10 MHz Up to > 1 MHz	With gas arrestors as coupling elements With ABDs as coupling elements

Other decoupling elements on request

Mechanical	
Dimensions (W x D x H)	450 x 570 x 195 mm (17.7 x 22.4 x 7.7 in)
Weight	Approx.. 10 kg net (22 lb)

Global Presence

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