

## Datasheet of band coaxial surge protection BrOK<sup>®</sup>, typ PKOpt-N-lambda-0,9G-BCD/F-M

Coaxial overvoltage protection **PKOpt-N-lambda-09G-BCD / FF** is a highly effective overvoltage protection **T 1 + 2 + 3** (lightning current arrester **class B** + lightning arrester **class C** + fine protection **class D**) fitted with a quarter-wave resonator the center of the **900 MHz** frequency band. It is designed to protect the inputs of receivers connected to coax. antenna cables to prevent the effects of overvoltages, which can be caused eg by elmg. industrial interference or thunderstorms. The protection protects the inputs of connected devices even in the case of a direct lightning strike into the lightning protection system of the protected object according to the wording of IEC 61312-1.

The condition of proper functioning of each overvoltage protection is its thorough electrical connection with equipotential busbar EP (HOP) of the object (usually to the secondary EP busbar or PE low-voltage PE conductor) a short conductor of yellow-green color with a minimum cross-section of **2,5 mm<sup>2</sup>**.

The PKO design ensures reliable lightning current leakage without thermodynamic destruction of the protection and its surroundings. This enables the installation of BrOK<sup>®</sup> coaxial overvoltage protectors even in plastic switchboards.

Type designations: **PKOpt-N-lambda-09G-BCD/F-M**

Catalog designation: **pkoPTng09bcd/fm**

### Technical parameters of protection:

Operating frequency band: **780 až 940 MHz**  
Attenuation factor / adaptation factor: **≤ -0,3 dB/≤ -20 dB** (see fig. 3)  
Test surge current **I<sub>ZRP</sub>**: **2,5 kA, 10/350 μs**  
Residual overvoltage **u (t)** on the protected output at **I<sub>ZRP</sub>**: **≤ 100 V<sub>p-p</sub>, t > 80 ns** (see fig. 2)

### Method of connecting protection to the signal path:

- as through cable connector with N/F-M connectors
- to equipotential busbar EP of the object with a stranded Cu conductor with a minimum cross-section 2,5 mm<sup>2</sup> with crimp lug and M5 screw.

Maximum dimensions: **122 x 65 mm**

Mounting position: **any**

Weight: **163g**

Degree of protection: **IP 20**

Fig. 1



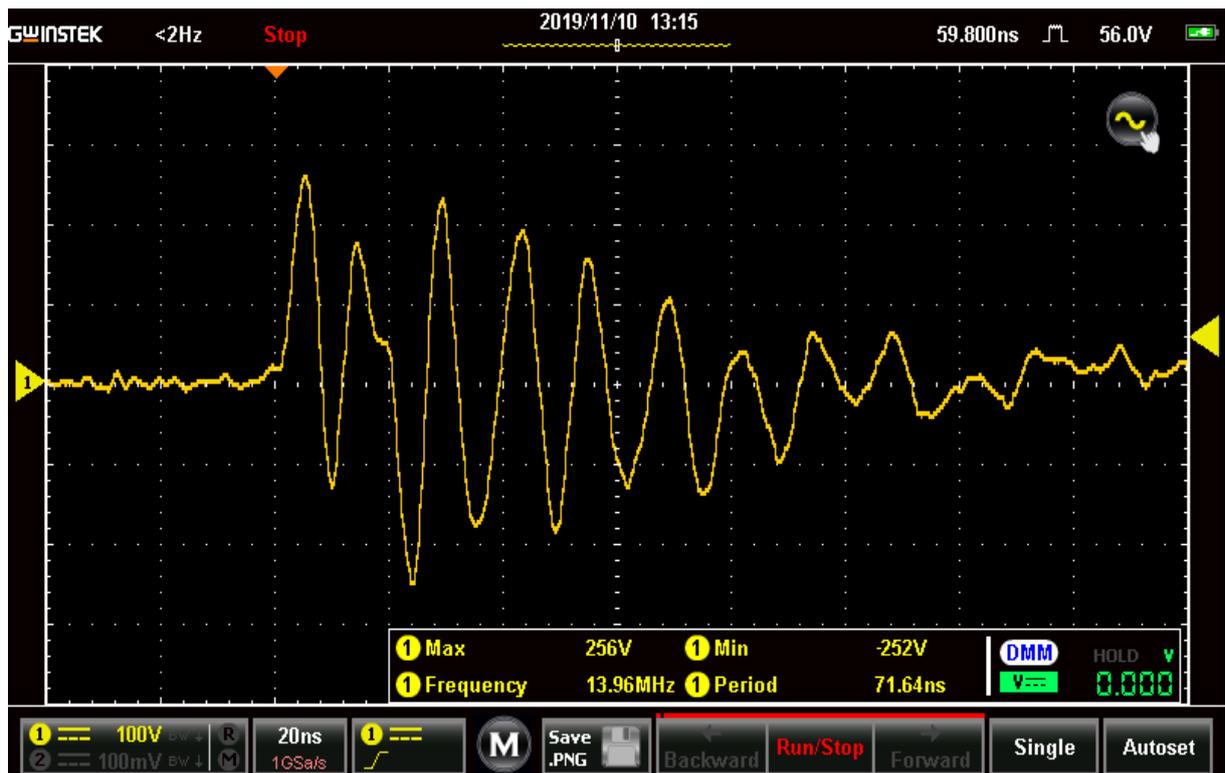


Fig. 2 Oscilogram residual overvoltage  $u(t)$  on the protected output of the protection PKOpt-N-lambda-0,9G-BCD/F-M in the shock current test 2,5 kA, 10/350  $\mu$ s.

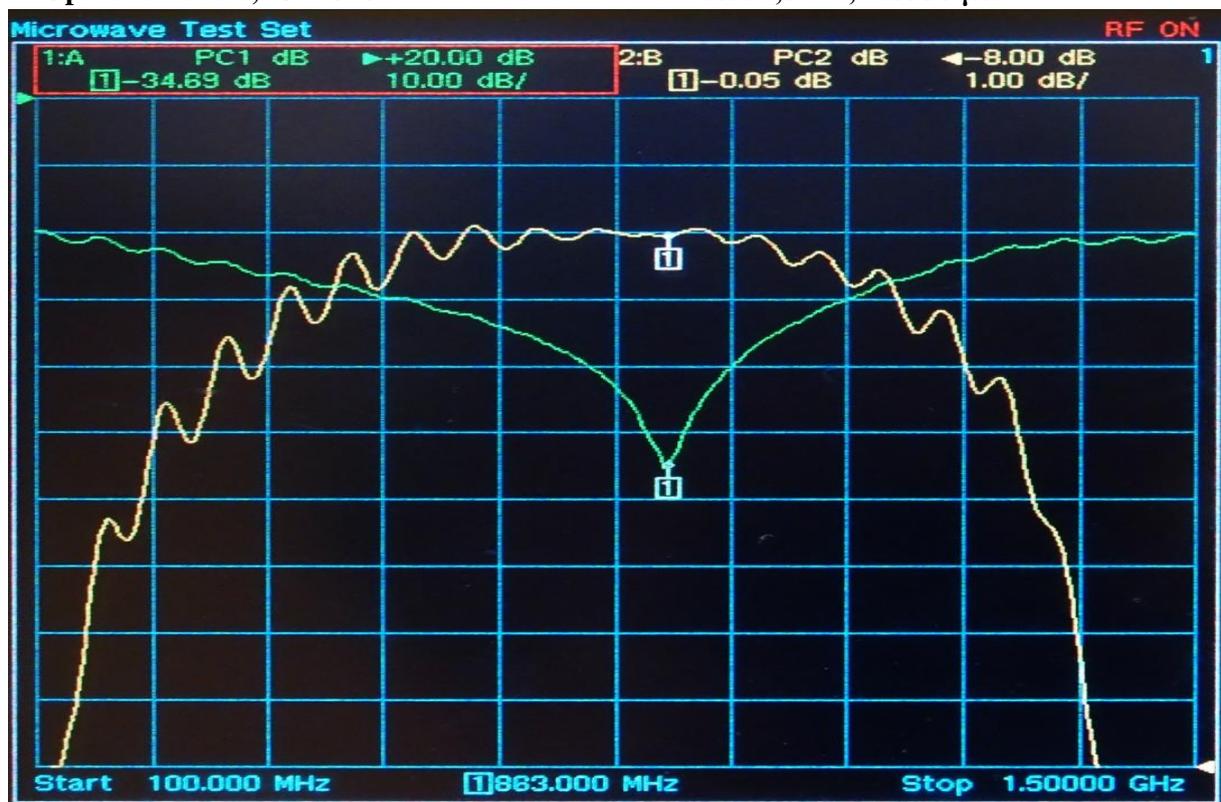


Fig. 3 **Factors of attenuation and adjustment** band coaxial surge protectors **PKOpt-N-lambda-0,9G-BCD/F-M**, measured in the frequency range 100 to 1500 MHz.

Setting the analyzer measuring ranges:

attenuation **1,0 dB/div** (yellow curve)

adaptation **10 dB/div** (green curve), measuring cursor position: **863 MHz**

**The declaration of conformity was issued on the basis of the test report number P 00/01/11 from accredited testing laboratory number 1184, ABEGU a. s., Zkušebna.**

**The overvoltage protection is manufactured according to the utility model number 10636**

## **Overvoltage protections BrOK<sup>®</sup> - quality at solid prices**

**The warranty period is 24 months from the date of sale.** The condition of acknowledgment of warranty for the claimed surge protection in doubtful cases, it is possible to check the installation conditions by the manufacturer's service technician and undamaged nameplate. For the duration of the complaint procedure the customer can lend functional surge protection of the same type.

**Technical advice is provided and serviced by the company:**

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Recommended retail price excluding 21% VAT: see **Price list**



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