

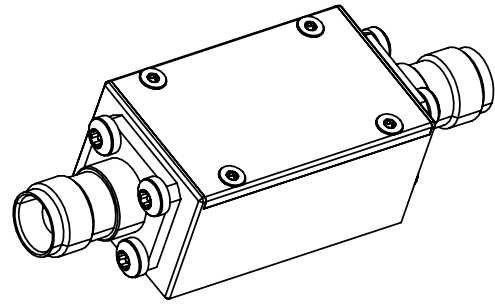
High Voltage Attenuator 20 dB

HVA-20A-TNC

Advanced TLP/HMM/HBM Solutions

1 Features

- 20 dB high voltage surge robust attenuator
- 4 kV pulse voltage
- DC - 6 GHz bandwidth
- TNC connectors (optional: SMA)



2 Description

The attenuator HVA-20A-TNC is used to attenuate high voltage pulse signals in a 50 Ω line. The device is symmetrical. Input and output can be exchanged.

3 Specifications

Nominal impedance ¹⁾	:	50 Ω
Nominal attenuation ²⁾	:	20 ⁺¹ ₋₁ dB
Frequency range ^{1) 2)}	:	DC to 6 GHz
Max. peak pulse input voltage	:	4 kV
Max. DC input voltage ^{1) 3)}	:	10 V
Max. average power dissipation	:	refer to Eqn. 1

¹⁾ input and output terminated with 50 Ω

²⁾ nominal attenuation ±3 dB

³⁾ no additional pulsed heating on top is allowed

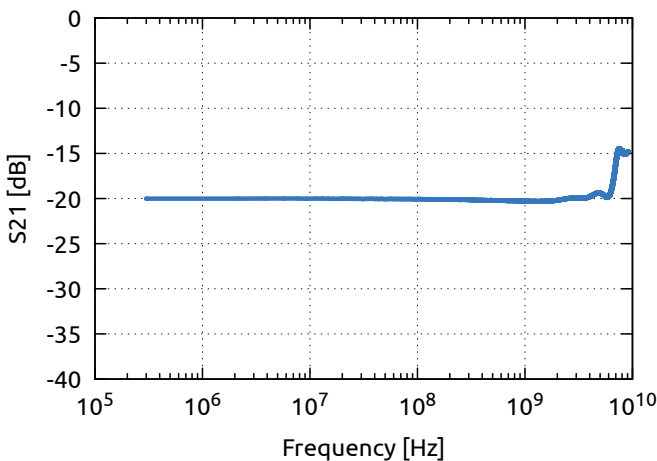


Figure 1: Typical frequency response

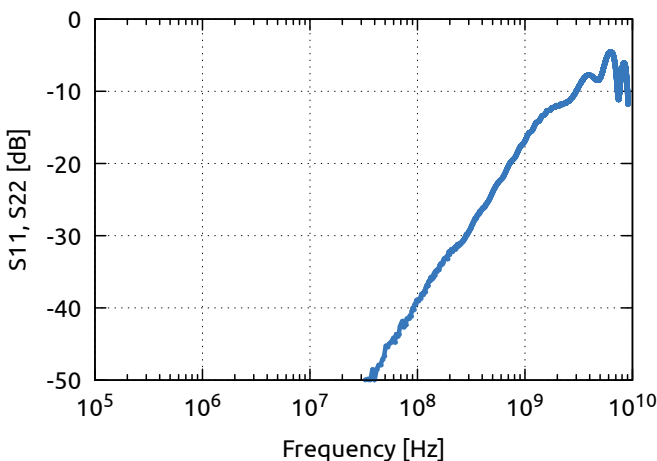


Figure 2: Typical return loss

The following equation must be satisfied for the input voltage V_{in} [V], pulse on-time t_{on} [s], pulse off-time t_{off} [s], duty cycle ($0 \leq k \leq 1$), and pulse repetition frequency f [Hz]:

$$\frac{V_{in}^2}{212} \cdot \frac{t_{on}}{t_{on} + t_{off}} = \frac{V_{in}^2}{212} \cdot k = \frac{V_{in}^2}{212} \cdot t_{on} \cdot f < 0.5 \quad (1)$$

4 Dimensions

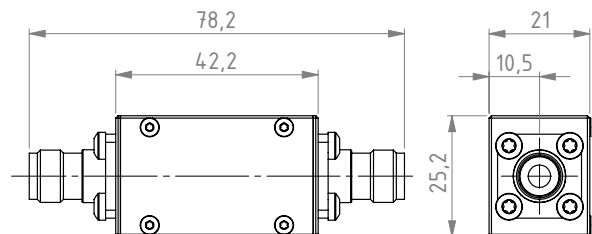


Figure 3: Dimensions in [mm]

5 Ordering Information

Optional available with SMA-connectors. Please specify at order.

Pos.	Description	Part No.
01	High Voltage Attenuator 20 dB TNC	HVA-20A-TNC

General

The product data contained in this data-sheet is exclusively intended for technically trained staff. You and your technical departments will have to evaluate the suitability of the product for the intended application and the completeness of the product data with respect to such application. Our products are solely intended to be commercially used internally and should not be sold to consumers. This data-sheet is describing the specifications of our products for which a warranty is being granted by HPPI GmbH. Any such warranty is granted exclusively pursuant to the terms and conditions of the respective supply agreement. There will be no guarantee of any kind for the product and its specifications. For further information on technology, specific applications of our product, delivery terms, conditions and prices please contact HPPI:

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