

Constant Impedance **New Product Announcement!**  
**Voltage Variable Attenuator**

**HVA-73+**

50Ω 5500 to 7000 MHz

**The Big Deal**

- Termination insensitive
- Low Insertion Loss: 1.6 dB
- Large attenuation range: 27 dB



CASE STYLE: CZ682

**Pricing: \$9.95 (QTY 1-9)**

**Product Overview**

The Mini-Circuits HVA series, surface mount, constant impedance voltage variable attenuators provide excellent attenuation and linearity performance while maintaining constant RF impedance across the attenuation range. Built using Mini-Circuits proven shielded module construction technology, these models integrate dual pin diodes along with internal 90 degree hybrids. This termination insensitive approach allows more flexibility so designers can locate the attenuators anywhere in their lineup, including cascading VVAs for true attenuation addition without VSWR interaction degrading the usable attenuation range.

**Key Features**

Feature	Advantages
Constant Impedance (Termination insensitive)	The HVA series VVA incorporates 90° hybrids to buffer internal circuits from source and load mismatch. This unique feature enables the HVA series to maintain performance independent of source and load impedance, and allows units to be cascaded with true additive attenuation.
Excellent flatness	Typical attenuation flatness less than 1 dB typ. across the full band from 0 to 25 dB attenuation is great for feed forward applications.
Return Loss	17 dB typ return loss across frequency and control voltage ranges provides an excellent match under all operating conditions allowing straightforward cascading.
High IP3	High +43 dBm IP3 typ. at min attenuation and +35 dBm typ. up to 1.0V allows flexibility to locate VVA in lineup where attenuation is required the most without degrading system linearity.



For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

**Notes:** 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp).