

## ATA-1000 Series Wide Band Amplifier

- High bandwidth(DC~25MHz)
- Output BNC connector, banana socket optional
- Input and output resistance adjustable
- One key saving common settings



## Technical Index

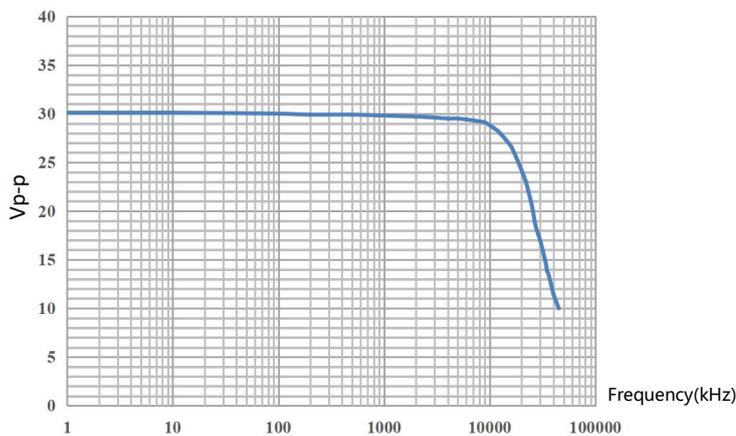
- Bandwidth (-3dB) up to 25MHz
- Maximum output voltage 70Vp-p ( $\pm 35$ Vp)
- Maximum output current 2Ap

## Introduction

ATA-1000 series is an ideal wide band amplifier that can amplify AC and DC signals. The bandwidth is as high as DC~25MHz, and it has 50  $\Omega$ , 1 M $\Omega$  (Or 50 $\Omega$  /10k $\Omega$ ) input resistance. It can perfectly match the signal source with high and low internal resistance to realize the perfect amplification of signal. The output resistance are adjustable, customers can choose flexibly according to the test requirements.

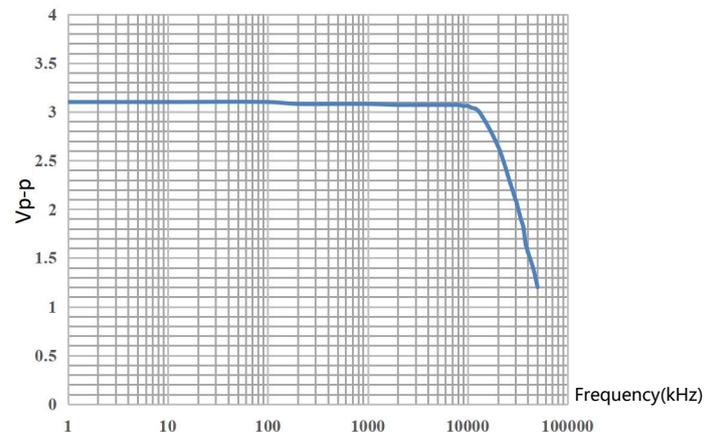
| Model                           | ATA-1200B                       | ATA-1220D                       | ATA-1372A                      |
|---------------------------------|---------------------------------|---------------------------------|--------------------------------|
| Output form                     | Single output                   | Differential output             | Single output                  |
| Bandwidth (-3dB)                | DC~25MHz                        | DC~21MHz                        | DC~3MHz                        |
| Maximum output voltage          | 30Vp-p ( $\pm 15$ Vp)           | 60Vp-p ( $\pm 30$ Vp)           | 70Vp-p ( $\pm 35$ Vp)          |
| Maximum output current          | 500mA <sub>p</sub> (DC~50Hz)    | 500mA <sub>p</sub> (DC~50Hz)    | 1Ap (DC~50Hz)                  |
|                                 | 1Ap (>50Hz)                     | 1Ap (>50Hz)                     | 2Ap (>50Hz)                    |
| Maximum output power            | 15W <sub>p</sub>                | 30W <sub>p</sub>                | 70W <sub>p</sub>               |
| Voltage gain                    | 20dB adjustable<br>(0.5dB step) | 26dB adjustable<br>(0.5dB step) | x0~40<br>(0.1 step/1 step)     |
| Load R <sub>L</sub> upper limit | $\geq 29\Omega$ (DC~50Hz)       | $\geq 58\Omega$ (DC~50Hz)       | $\geq 33\Omega$ (DC~50Hz)      |
|                                 | $\geq 14\Omega$ (above 50Hz)    | $\geq 28\Omega$ (above 50Hz)    | $\geq 15.5\Omega$ (above 50Hz) |
| Slew Rate                       | $\geq 1666$ V/ $\mu$ s          | $\geq 2798$ V/ $\mu$ s          | $\geq 467$ V/ $\mu$ s          |
| Output resistance               | 1 $\Omega$ /50 $\Omega$         | 2 $\Omega$ /100 $\Omega$        | $\leq (0.2\Omega+0.4\mu$ H)    |
| Input resistance                | 50 $\Omega$ / 1M $\Omega$       | 50 $\Omega$ / 1M $\Omega$       | 50 $\Omega$ / 10k $\Omega$     |
| Output voltage error            | $\leq \pm 3\%$ FS@1kHz          |                                 | $\leq \pm 2\%$ FS@1kHz         |
| Total harmonic distortion (THD) | $\leq 0.1\%$ @1kHz, 30Vp-p      |                                 | $\leq 0.1\%$ @1kHz, 70Vp-p     |
| Output voltage zero-point drift | $\leq \pm 0.1$ V                |                                 | $\leq \pm 10$ mV               |
| Signal-noise ratio (SNR)        | $\geq 80$ dB                    |                                 | $\geq 70$ dB                   |
| Fuse                            | 1A/250V                         |                                 | 2A/250V                        |
| Output Connector                | BNC、4mm Banana socket           |                                 | BNC                            |

|                       |                                                                    |
|-----------------------|--------------------------------------------------------------------|
| Input amplitude       | 0~10Vp-pMAX                                                        |
| Protection            | Overcurrent protection                                             |
| Signal Ground         | It is connected with the grounding of the shell and the power line |
| Supply voltage        | AC220V±10%, 50Hz                                                   |
| Operating temperature | 0°C~45°C                                                           |
| Storage temperature   | -20°C~50°C                                                         |
| Humidity              | ≤80%RH, no condensation                                            |
| Size (W * H * D)      | 262*163*365mm                                                      |

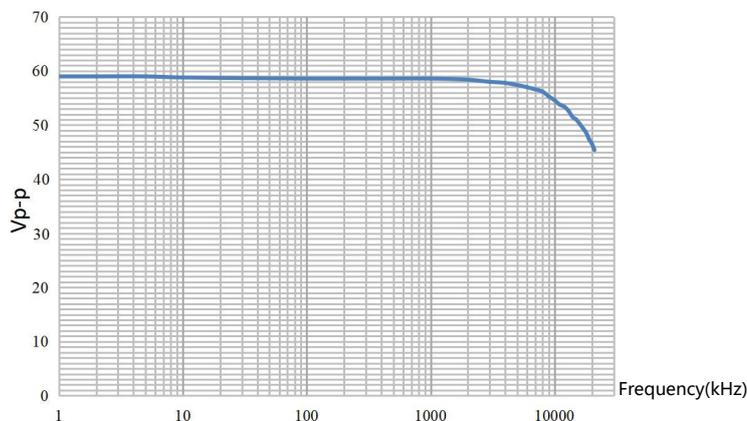
**ATA-1200B**


Amplitude-frequency characteristic

(Maximum output voltage Vp-p)

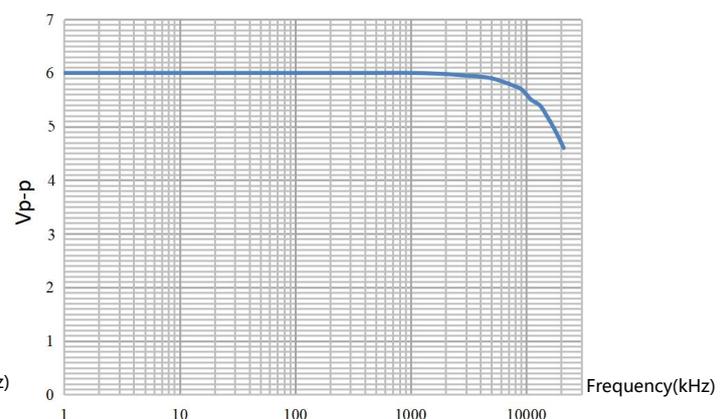
**ATA-1200B**


Small signal amplitude-frequency characteristic

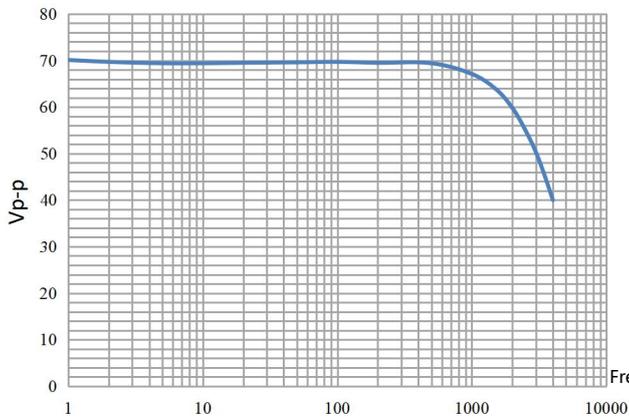
**ATA-1220D**


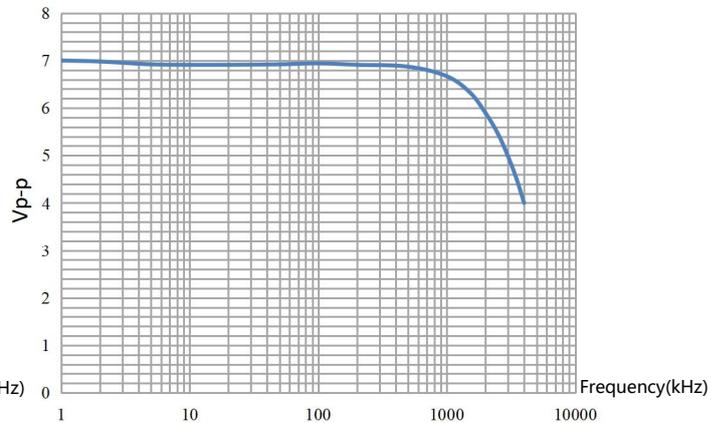
Amplitude-frequency characteristic

(Maximum output voltage Vp-p)

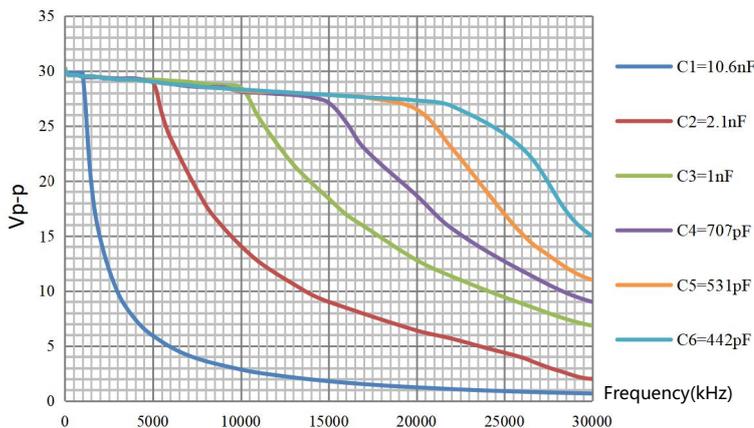
**ATA-1220D**


Small signal amplitude-frequency characteristic

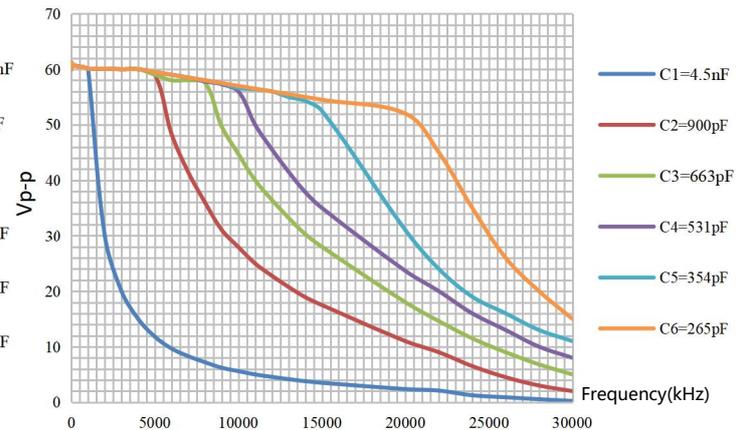
**ATA-1372A**

 Amplitude-frequency characteristic  
 (Maximum output voltage  $V_{p-p}$ )

**ATA-1372A**


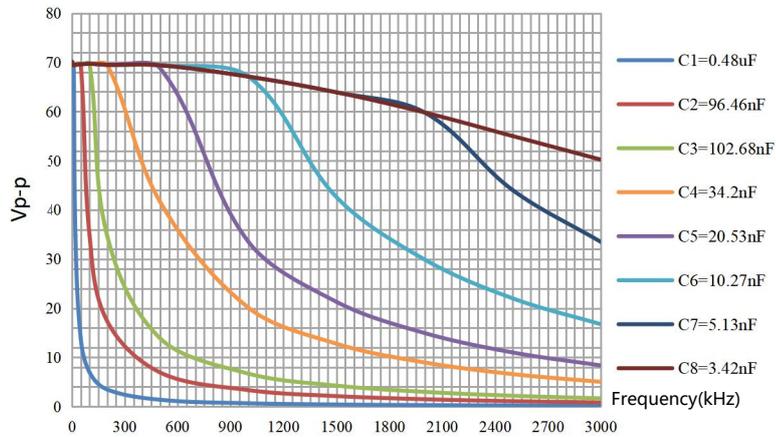
Small signal amplitude-frequency characteristic

**ATA-1200B**


ATA-1200B Capacitive loads curve

**ATA-1220D**


ATA-1220D Capacitive loads curve

**ATA-1372A**

ATA-1372A Capacitive loads curve

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