

## ATA-100 Series Power Amplifier

- OLED panel display
- Input and output resistance adjustable
- Overload protection



## Technical Index

- Bandwidth (-3dB) DC~5MHz
- Maximum output voltage 25Vp-p ( $\pm 12.5Vp$ )
- Maximum output current 2Ap

## Introduction

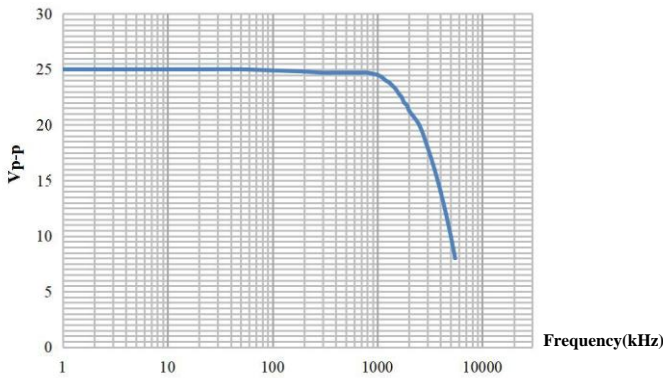
ATA-100 series is an ideal power amplifier that can amplify AC and DC signals. The bandwidth is DC~5MHz, and the input resistance can be adjusted to 50 $\Omega$  or 1M $\Omega$  which matches the signal source of low or high internal resistance, realizes the lossless amplification of the signal. The output resistance 0.5 $\Omega$  and 50 $\Omega$  are adjustable, customers can choose flexibly according to the test requirements.

Model	ATA-101	ATA-103	ATA-105
Form of output	Single output	Single output	Single output
Bandwidth (-3dB)	DC~1MHz	DC~3MHz	DC~5MHz
Maximum output voltage	25Vp-p ( $\pm 12.5Vp$ )	25Vp-p ( $\pm 12.5Vp$ )	25Vp-p ( $\pm 12.5Vp$ )
Maximum output current	1Ap (DC~50Hz)	1Ap (DC~50Hz)	1Ap (DC~50Hz)
	2Ap (>50Hz)	2Ap (>50Hz)	2Ap (>50Hz)
Maximum output power	25Wp	25Wp	25Wp
Fuse	2A/250V	2A/250V	2A/250V
Voltage gain	x1/x10 adjustable	x1/x10 adjustable	x1/x10 adjustable
Load $R_L$ upper limit	$\geq 12\Omega$ (DC~50Hz)	$\geq 12\Omega$ (DC~50Hz)	$\geq 12\Omega$ (DC~50Hz)
	$\geq 5.75\Omega$ (>50Hz)	$\geq 5.75\Omega$ (>50Hz)	$\geq 5.75\Omega$ (>50Hz)
Slew rate	$\geq 56V/\mu s$	$\geq 167V/\mu s$	$\geq 278V/\mu s$
Output resistance	0.5 $\Omega$ / 50 $\Omega$ (Customizable)		
Input resistance	50 $\Omega$ / 1M $\Omega$		
Input amplitude	0~10Vp-pMAX		
Output voltage error	$\leq \pm 3\%FS@1kHz$		
Total harmonic distortion (THD)	$\leq 0.5\%@1kHz, 25Vp-p$		
Output voltage zero drift	$\leq \pm 0.2V$		

## Xi'an Aigtek Electronic Technology Co., Ltd.

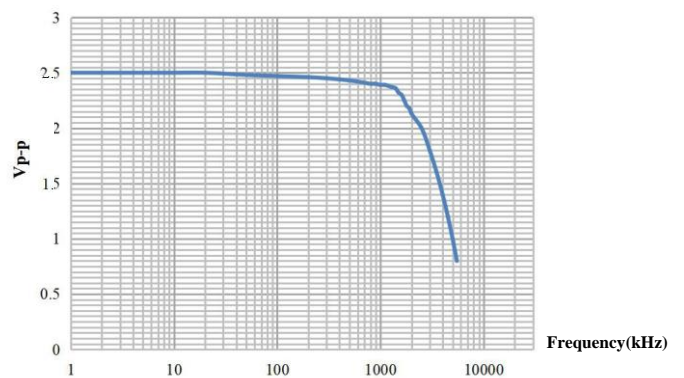
Signal to noise ratio	≥60dB
Output Connector	BNC
Protection	Overcurrent protection
Signal Ground	Ground connected with the case and the power line
Supply voltage	AC220V±10%, 50Hz
Operating temperature	0°C~45°C
Storage temperature	-20°C~50°C
Humidity	≤80%RH, no condensation
Size (W * H * D)	168*55*290mm

**ATA-101**



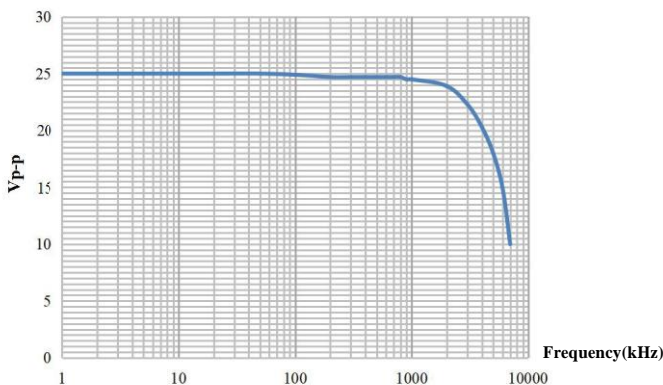
Amplitude-frequency characteristic  
(Maximum output voltage Vp-p)

**ATA-101**



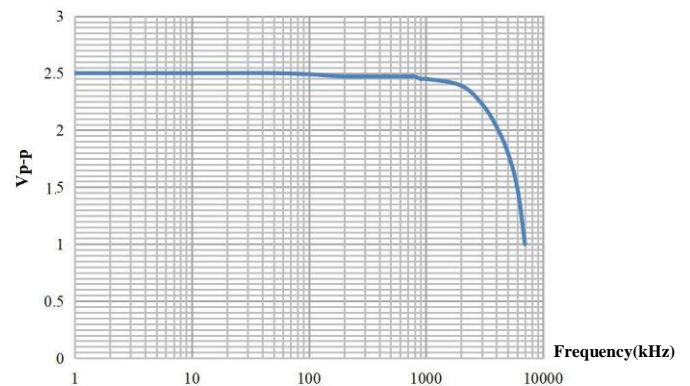
Small signal amplitude-frequency characteristic

**ATA-103**



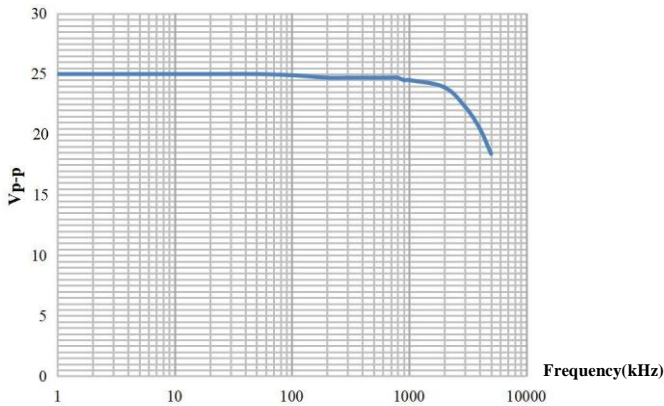
Amplitude-frequency characteristic  
(Maximum output voltage Vp-p)

**ATA-103**



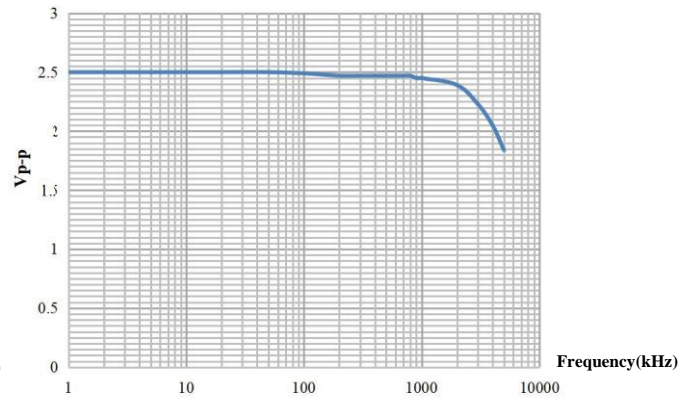
Small signal amplitude-frequency characteristic

**ATA-105**



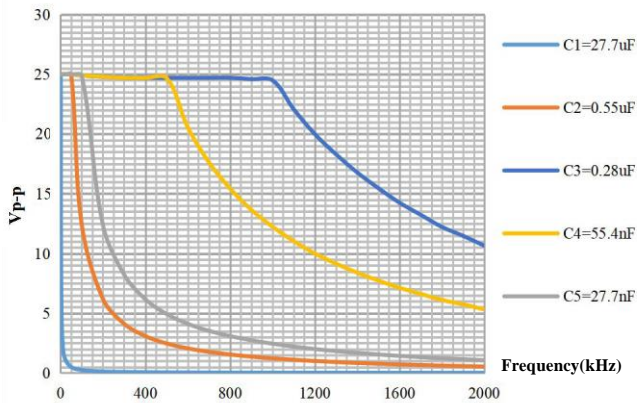
Amplitude-frequency characteristic  
(Maximum output voltage  $V_{p-p}$ )

**ATA-105**



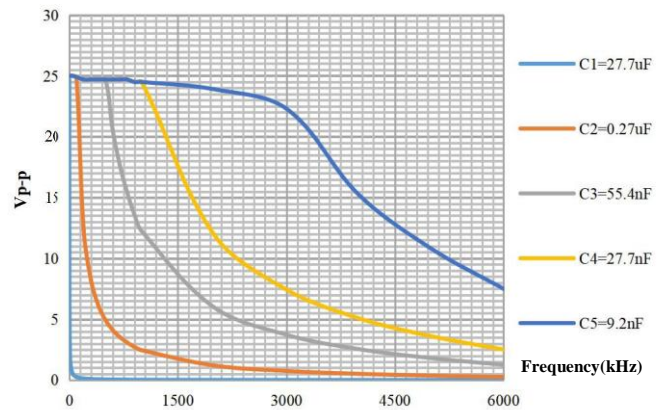
Small signal amplitude-frequency characteristic

**ATA-101**



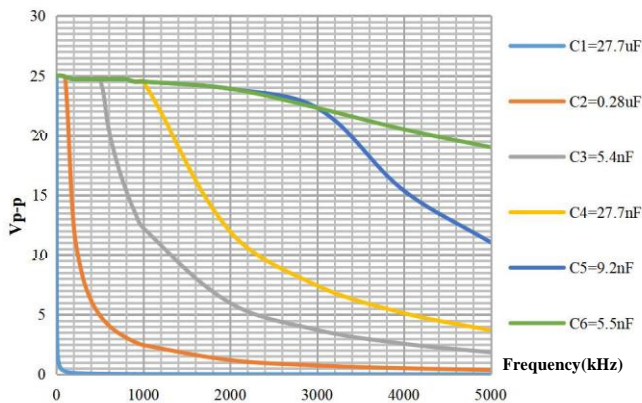
ATA-101 Capacitive loads curve

**ATA-103**



ATA-103 Capacitive loads curve

**ATA-105**



ATA-105 Capacitive loads curve