

ATA-100 Series Power Amplifier

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



Technical Index

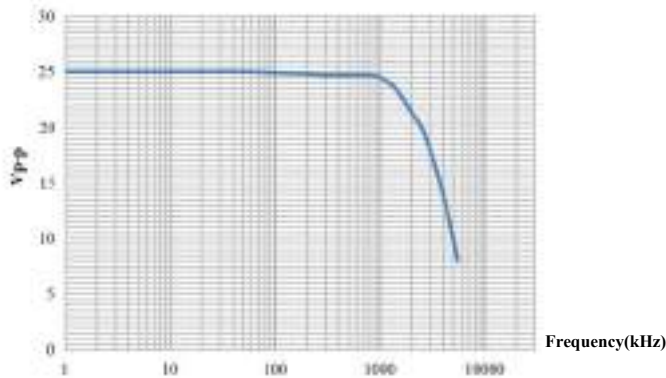
- Bandwidth (-3dB) DC~5MHz
- Maximum output voltage 25Vp-p (± 12.5 Vp)
- Maximum output current 2Ap

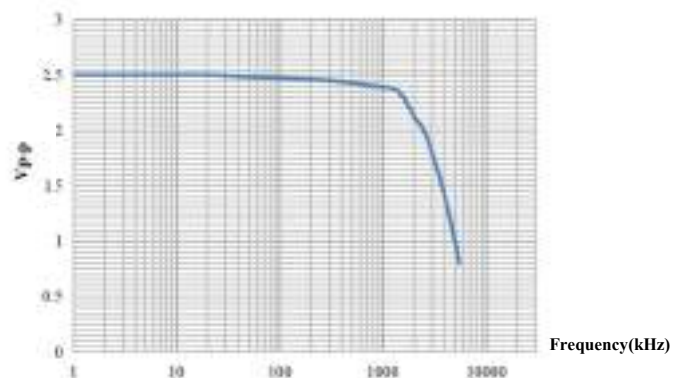
Introduction

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 Ω or 1M Ω which matches the signal source of low or high internal resistance, realizes the lossless amplification of the signal. The output resistance 0.5 Ω and 50 Ω are adjustable, customers can choose flexibly according to the test requirements.

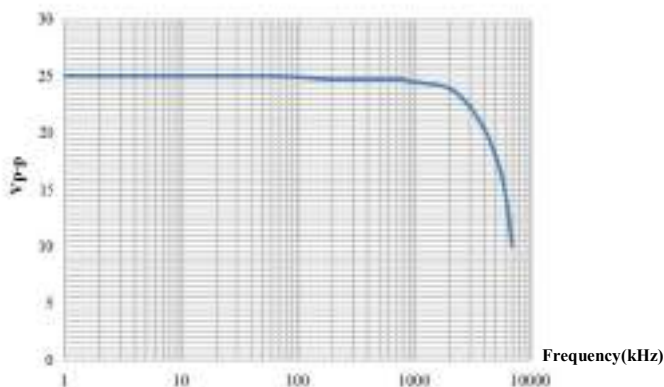
Model	ATA-101	ATA-103	ATA-105
Form of output	Single output	Single output	Single output
Bandwidth (-3dB)	DC~1MHz	DC~3MHz	DC~5MHz
Maximum output voltage	25Vp-p (± 12.5 Vp)	25Vp-p (± 12.5 Vp)	25Vp-p (± 12.5 Vp)
Maximum output current	1Ap (DC~50Hz)	1Ap (DC~50Hz)	1Ap (DC~50Hz)
	2Ap (>50Hz)	2Ap (>50Hz)	2Ap (>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	≥ 56 V/ μ s	≥ 167 V/ μ s	≥ 278 V/ μ s
Output resistance	0.5 Ω / 50 Ω (Customizable)		
Input resistance	50 Ω / 1M Ω		
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	$\leq \pm 0.2$ V		

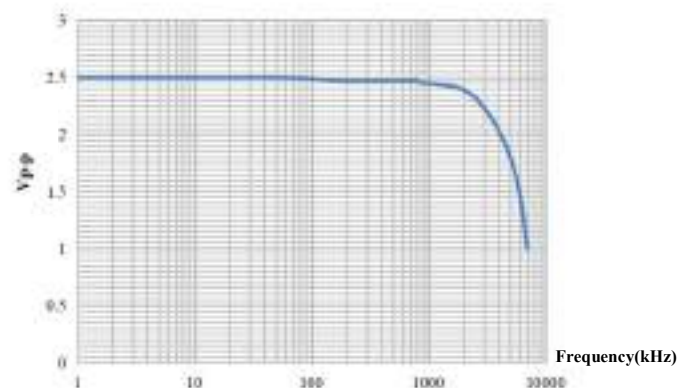
Signal to noise ratio	≥60dB
Output Connector	BNC
Protection	Overcurrent protection
Signal Ground	Ground connected with the case and the power line
Supply voltage	AC220V±10%, 50Hz
Operating temperature	0°C~45°C
Storage temperature	-20°C~50°C
Humidity	≤80%RH, no condensation
Size (W * H * D)	168*55*290mm

ATA-101

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

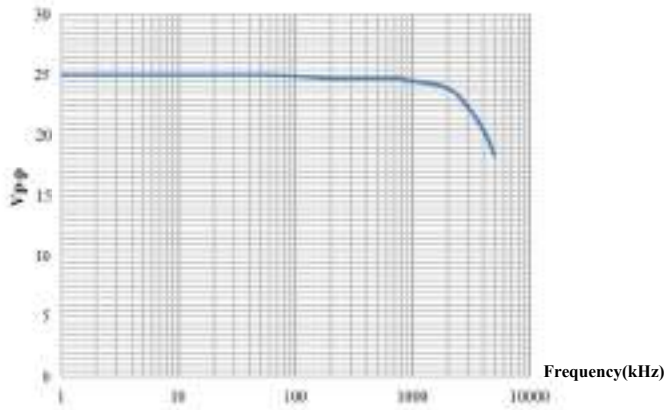
ATA-101


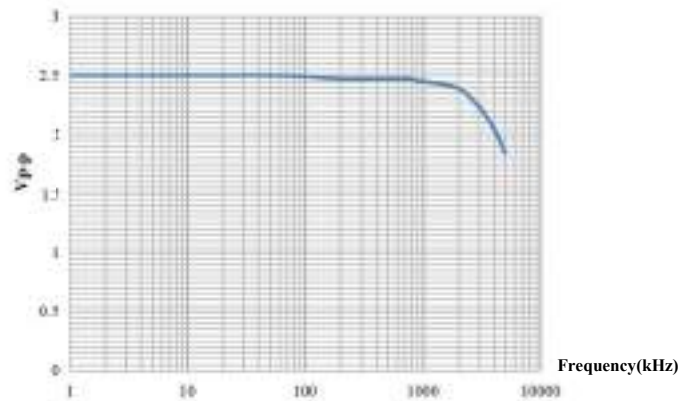
Small signal amplitude-frequency characteristic

ATA-103

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

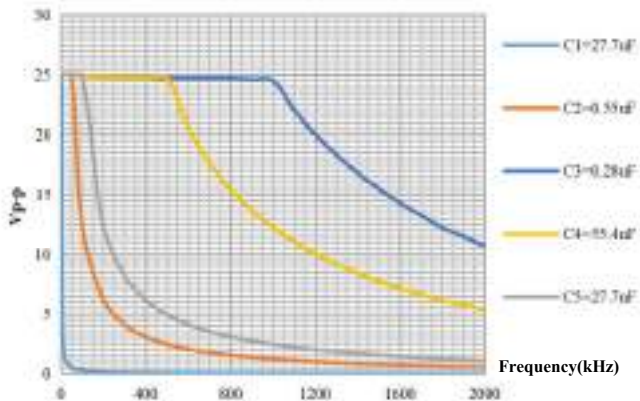
ATA-103


Small signal amplitude-frequency characteristic

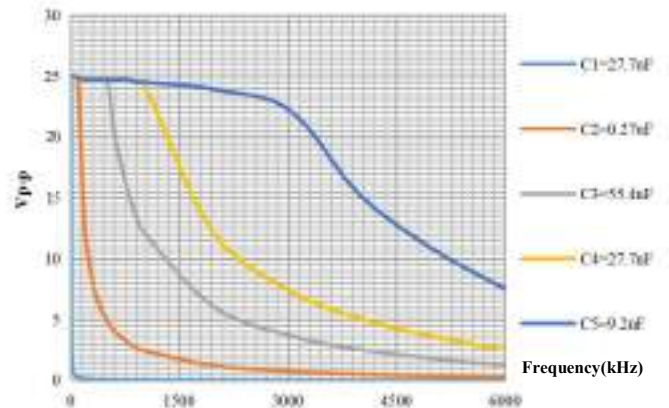
ATA-105

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

ATA-105


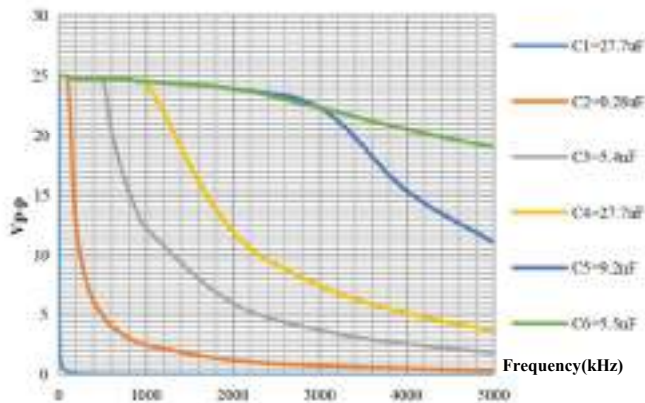
Small signal amplitude-frequency characteristic

ATA-101


ATA-101 Capacitive loads curve

ATA-103


ATA-103 Capacitive loads curve

ATA-105


ATA-105 Capacitive loads curve