Xi'an Aigtek Electronic Technology Co., Ltd.

ATA-7000 Series High Voltage Amplifier

Maximum output voltage 6kVp-p

Voltage gain adjustable by numerical control (1step/10 step)

Over current and over temperature protection

Technical Index

Bandwidth (-3dB) up to DC~100KHz

Output voltage up to 6kVp-p (±3kVp)

Maximum output current 40mAp

Introduction

ATA-7000 series is an ideal high voltage amplifier that can amplify AC and DC signals. The Single output is 6kVp-p (±3kVp) high voltage, which can drive high-voltage load. The voltage gain can be adjusted by numerical control, and the common settings can be saved by one key.

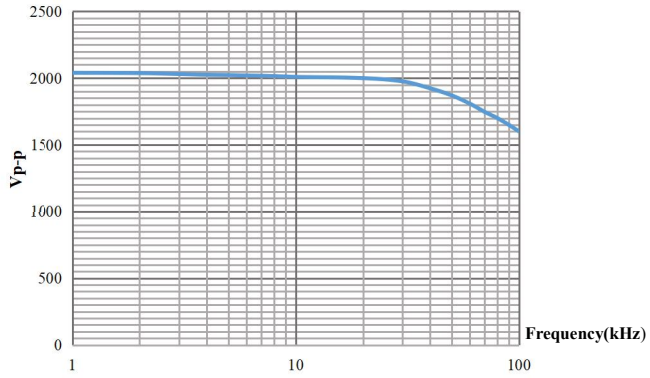
Model	ATA-7010	ATA-7015
Output form	Single output	Single output
Bandwidth (-3dB)	DC~100KHz	DC~80KHz
Maximum output voltage	2kVp-p (±1kVp)	3kVp-p (±1.5kVp)
Maximum output current	20mAp (DC~50Hz)	20mAp (DC~50Hz)
	40mAp (>50Hz)	40mAp (>50Hz)
Maximum output power	40Wp	60Wp
Fuse	3A/250V	4A/250V
Voltage gain	x0~1000 (1 step/10 step)	x0~1000 (1 step/10 step)
Load R_L upper limit	≥49.5kΩ (DC~50Hz)	≥74.5kΩ (DC~50Hz)
	≥24.5kΩ (>50Hz)	≥37kΩ (>50Hz)
Output resistance	500Ω	500Ω
Slew Rate	≥445V/μs	≥534V/μs
Output voltage error	≤±1% @ (DC,1kV)	≤±1% @ (DC,1.5kV)
Input resistance	10kΩ	
Voltage monitoring	1000：1	
Input amplitude	0~10Vp-pMAX	
Total harmonic distortion (THD)	≤1%@1kHz，1kVp-p	

Output voltage Zero-point drift	≤±1V
Output Connector	SHV RF connector
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℃~45℃
Storage temperature	-20℃~50℃
Humidity	≤80%RH，No condensation
Size (W * H * D)	440*163*565mm

Model	ATA-7020	ATA-7025	ATA-7030
Output form	Single output	Single output	Single output
Bandwidth（-3dB）	DC~30KHz	DC~10KHz	DC~5KHz
Maximum output voltage	4kVp-p（±2kVp）	5kVp-p（±2.5kVp）	6kVp-p（±3kVp）
Maximum output current	15mAp（DC~50Hz）	15mAp（DC~50Hz）	15mAp（DC~50Hz）
	30mAp（>50Hz）	30mAp（>50Hz）	30mAp（>50Hz）
Maximum output power	60Wp	75Wp	90Wp
Fuse	4A/250V	4A/250V	4A/250V
Voltage gain	x0~1000（1 step/10 step）	x0~1000（1 step/10 step）	x0~1000（1 step/10 step）
Load R_L upper limit	≥132.33kΩ（DC~50Hz）	≥165.17kΩ（DC~50Hz）	≥198.5kΩ（DC~50Hz）
	≥65.67kΩ（>50Hz）	≥81.8kΩ（>50Hz）	≥98.5kΩ（>50Hz）
Output resistance	1kΩ	1.5kΩ	1.5kΩ
Slew Rate	≥267V/μs	≥112V/μs	≥67V/μs
Output voltage error	≤±1% @（DC,2kV）	≤±1% @（DC,2.5kV）	≤±1% @（DC,3kV）
Input resistance	10kΩ		
Voltage monitoring	1000：1		
Input amplitude	0~10Vp-pMAX		
Total harmonic distortion (THD)	≤1%@1kHz，1kVp-p		
Output voltage Zero-point drift	≤±1V		
Output Connector	SHV RF connector		
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℃~45℃
Storage temperature	-20℃~50℃
Humidity	≤80%RH，No condensation
Size (W * H * D)	440*163*565mm

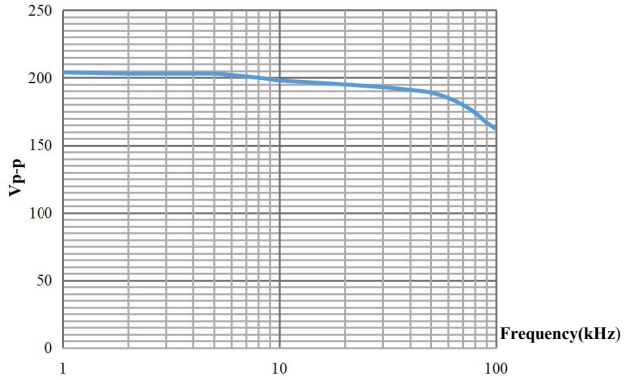
ATA-7010



Amplitude-frequency characteristic

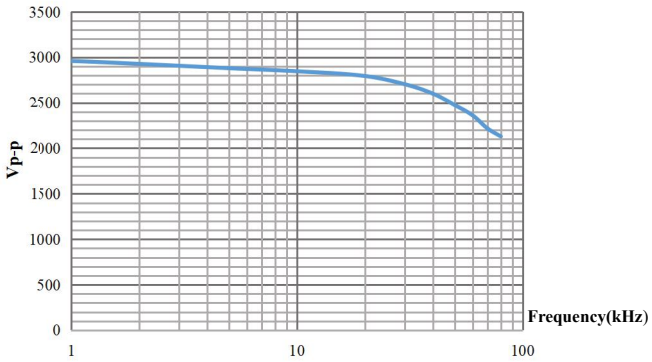
(Maximum output voltage Vp-p)

ATA-7010



Small signal amplitude-frequency characteristic

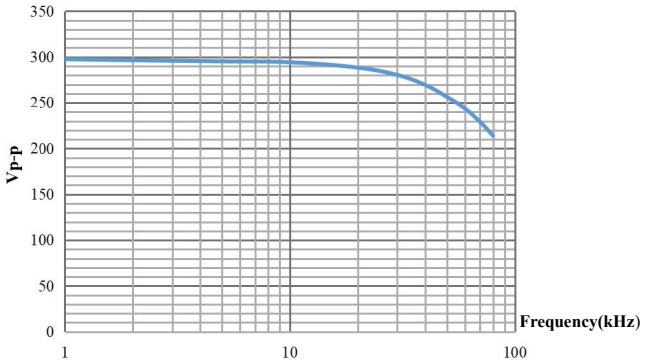
ATA-7015



Amplitude-frequency characteristic

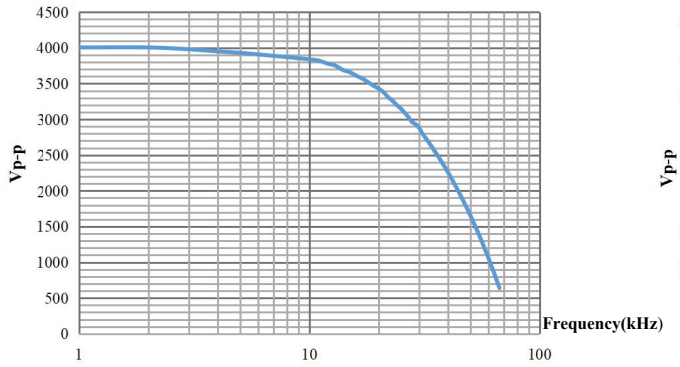
(Maximum output voltage Vp-p)

ATA-7015



Small signal amplitude-frequency characteristic

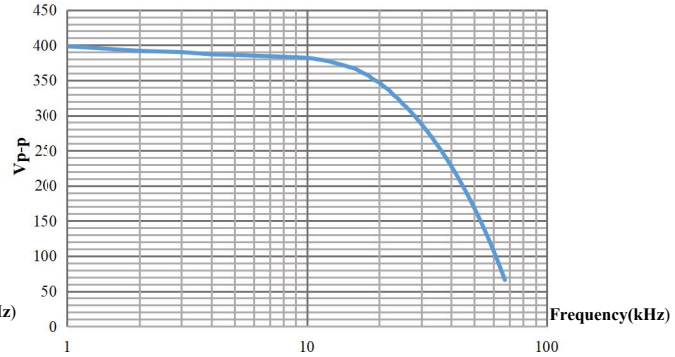
ATA-7020



Amplitude-frequency characteristic

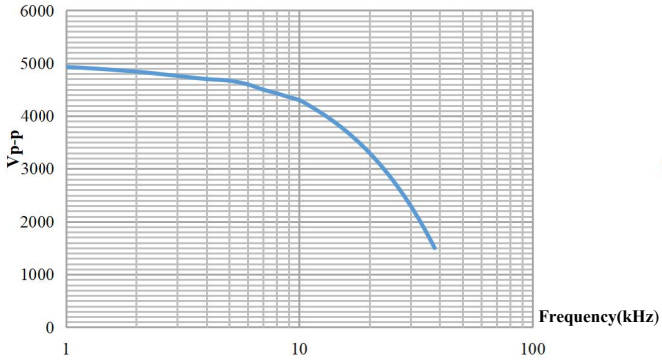
(Maximum output voltage Vp-p)

ATA-7020



Small signal amplitude-frequency characteristic

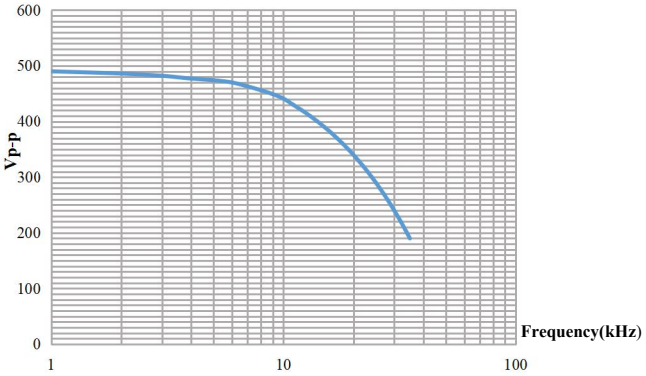
ATA-7025



Amplitude-frequency characteristic

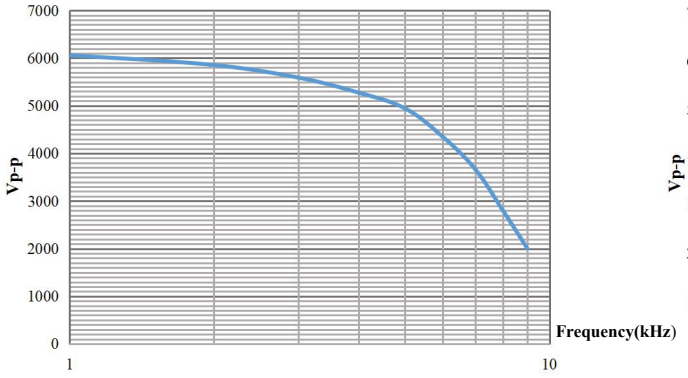
(Maximum output voltage Vp-p)

ATA-7025



Small signal amplitude-frequency characteristic

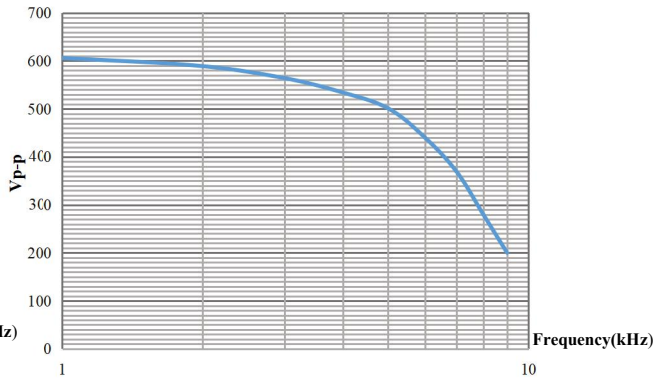
ATA-7030



Amplitude-frequency characteristic

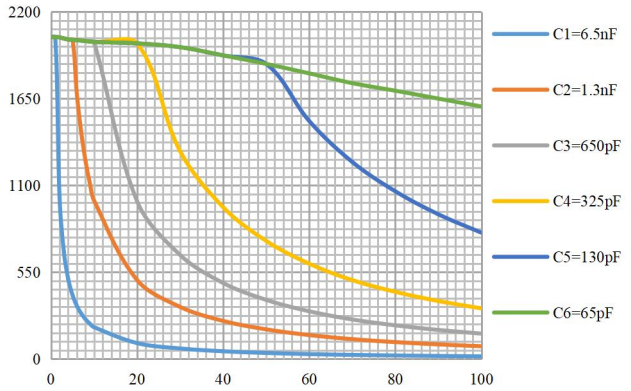
(Maximum output voltage Vp-p)

ATA-7030



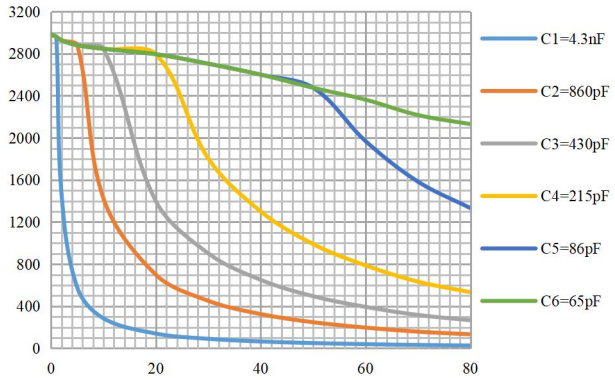
Small signal amplitude-frequency characteristic

ATA-7010



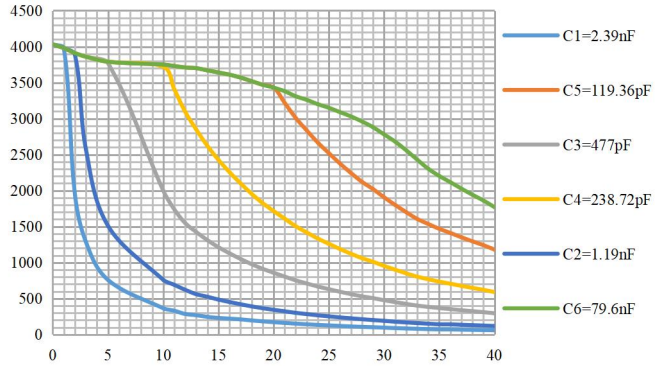
ATA-7010 Capacitive loads curve

ATA-7015



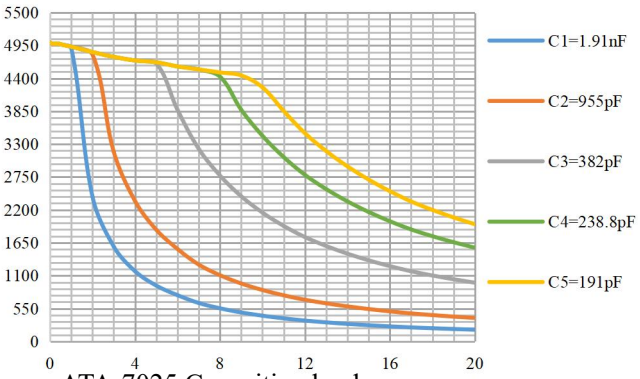
ATA-7015 Capacitive loads curve

ATA-7020



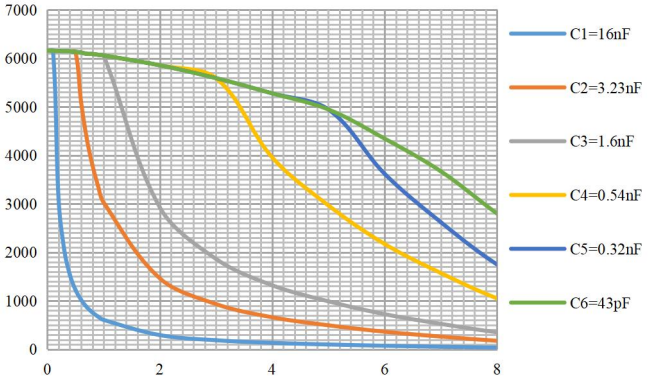
ATA-7020 Capacitive loads curve

ATA-7025



ATA-7025 Capacitive loads curve

ATA-7030



ATA-7030 Capacitive loads curve

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