

ONE 120.4

[Rev. 2.0 – 2012.04]

4-channel AB class amplifier

CEA-2006-A SPECIFICATIONS

POWER RATING: 120 Watt per channel @ 4 Ohm < 1% THD+N
SN RATIO: >81 dBA (reference: 1 Watt into 4 Ohm)

MOS SPECIFICATIONS (Tcase = 25 °C / 4 Ohm stereo / 0.4V input level @ 14.4 Volt if not otherwise specified)

TARGET POWERS:
120 Watt x 4 - ST @ 4 Ohm
170 Watt x 4 - ST @ 2 Ohm
340 Watt x 2 - BTL @ 4 Ohm

EFFECTIVE POWERS:
120 Watt (92 Watt @12V6) x 4
174 Watt (133 Watt @12V6) x 4
348 Watt (266 Watt @12V6) x 2

THD @ 4 Ohm / ST mode:
THD @ 2 Ohm / ST mode:
DIM @ 4 Ohm / ST mode:
DIM @ 2 Ohm / ST mode:

@ 4 Ohm / ST mode / 1% THD / 1KHz - **52.2 A** ($\eta = 63.8\%$)
@ 2 Ohm / ST mode / 1% THD / 1KHz - **88.4 A** ($\eta = 54.7\%$)
@ 4 Ohm / BTL mode / 1% THD / 1KHz - **88.4 A** ($\eta = 54.7\%$)

< **0.02** % (1KHz / 90% Power rating ref)
< **0.02** % (1KHz / 90% Power rating ref)
< ---- % (Power rating ref)
< ---- % (Power rating ref)

DC-DC converter typology:

Conversion frequency:

Absolute maximum operation supply voltage range:

Recommended operation supply voltage range:

Power-on/Power-off Voltage Threshold:

Mute delay time:

Secondary voltages (Amp. / Driver / Pre.):

Max output offset voltage (each channel):

Standby current:

Quiescent consumption @ 12V6 / 14V4:

Idle current regulation @ 14V4 (no signal):

Quiescent consumption @ 12V6 / 14V4:

Thermal protection consumption:

Battery ground vs secondary ground decoupling:

Body ground vs battery ground decoupling:

Bandwidth (-3dB ÷ 1 Watt):

Input sensitivity (Power rating ref):

Input impedance @ 1 KHz (STEREO input):

Input capacitance @ 1 KHz (STEREO input):

Input ground decoupling:

S/N ratio (AP filter 10 Hz - 500 KHz) – Power rating ref:

S/N ratio (AP filter 10 Hz - 22 KHz) – Power rating ref:

Eq. Input noise (AP filter 10 Hz - 500 KHz):

Eq. Input noise (AP filter 10 Hz - 22 KHz):

Channel separation @ 100Hz / 1KHz / 10KHz – 10 Watt ref:

Features:

Unregulated

45 KHz ($\pm 6\%$)

10.5 V ÷ 15 V

11 V ÷ 14.4 V

9.5 V / 8.0 V

3 secs

± 36.7 V / ± 13.6 V / ± 14.9 V

± 15 mV

< 0.1 mA (typical)

0.86 A / 0.92 A (no idle current regulation)

0.05 A (each trimmer)

0.95 A / 1.02 A (with idle current set)

≈ 0.2 A

1 KOhm

68 Ohm

< 5 Hz ÷ 100 KHz

0.35 Vrms ÷ 16 Vrms

11 Kohm [Low Level] / **47R** [High Level]

220 pF [Low Level] / **10 nF** [High Level]

47R [Low Level] / **50 Kohm** [High Level]

84 dB

102 dB (“A” weighted)

25.2 uV

3.2 uV (“A” weighted)

79 dB / 79 dB / 66 dB

HIGH Pass [Front] / **HIGH Pass or LOW Pass** [Rear]

(45 ÷ 225Hz - 12dB/oct) [Front] & [Rear]

Remote Volume Control [Rear] (low pass only)

(-12dB ÷ 0dB)

Front Stage Adjuster [Front] / **Phase Shift 0° ÷ 180°** [Rear]

High Low Adapter [Front] & [Rear] (auto switch-on)

88 °C ($\pm 5^{\circ}\text{C}$)

50 °C ($\pm 5^{\circ}\text{C}$)

68 / 81 [Front] - **67 / 78** [Rear]

68 / 81 [Front] - **67 / 79** [Rear]

63 / 77 [Front] - **64 / 74** [Rear]

2 Ohm / 4 Ohm (Stereo / Bridged)

2x40 A (onboard)

Thermal cutoff Threshold:

Cooling Fan Temperature Threshold:

Damping factor @ 100 Hz - 10 Watt ref (Right / Left):

Damping factor @ 1 KHz - 10 Watt ref (Right / Left):

Damping factor @ 10 KHz - 10 Watt ref (Right / Left):

Load drive limitations (*):

Suggested fuse:

(*) **VERY IMPORTANT NOTE - READ CAREFULLY**

4 Ohm ST or 8 Ohm BTL – CONTINUOUS SINEWAVE SIGNAL – pure resistive load or speaker load

2 Ohm ST or 4 Ohm BTL – MUSICAL SIGNAL – pure resistive load or speaker load