

AS 300.2

2-channel AB class amplifier

[Rev. 2.0 - 2012/06]

CEA-2006-A SPECIFICATIONS

POWER RATING: **300 Watt per channel @ 4 Ohm < 1% THD+N**
SN RATIO: **>86 dBA (reference: 1 Watt into 4 Ohm)**

MOS SPECIFICATIONS (Tcase = 25 °C / 4 Ohm stereo / 0.2V input level @ 14.4 Volt if not otherwise specified)

TARGET POWERS:
300 Watt per channel @ 4 Ohm
550 Watt per channel @ 2 Ohm
1100 Watt BTL mode @ 4 Ohm
1800 Watt BTL mode @ 2 Ohm (*)

EFFECTIVE POWERS: **330** Watt (260 Watt @12V6) x 2 67.8 A ($\eta = 68.0\%$) @ 4 Ohm / ST mode / 1% THD / 1KHz
562 Watt (432 Watt @12V6) x 2 123.4 A ($\eta = 63.3\%$) @ 2 Ohm / ST mode / 1% THD / 1KHz
1124 Watt (864 Watt @12V6) x 1 123.4 A ($\eta = 63.3\%$) @ 4 Ohm / BTL mode / 1% THD / 1KHz

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

< **0.035 %** (1KHz / 90% Power rating ref)
< **0.035 %** (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 @ 12V:

Idle current regulation (no signal):

Quiescent consumption @ 12V:

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:

Xover functions:

Filter slope - Filter "Q":

Thermal cutoff Threshold:

ProSPEED® Fan Controller 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):

Output impedance @ 1 KHz - 10 Watt ref (Right / Left):

Load drive limitations (*):

Suggested fuse:

Unregulated (upper voltage limitation)

50 KHz ($\pm 6\%$)

10 V ÷ 16 V

11 V ÷ 14.4 V

9 V / 7.5 V

3 secs

± 52.3 V / ± 7.5 V / ± 13.5 V

± 15 mV

1.8 mA (typical)

1.4 A (no idle current regulation)

0.1 A (each channel)

1.6 A (with idle current setted)

1.7 A

125 Ohm

65 Ohm

< 5 Hz ÷ 150 KHz

0.2 V ÷ 5 V

11 KOhm

220 pF

15R

93 dB

110 dB ("A" weighted)

5.29 uV

0.75 uV ("A" weighted)

83 dB / 76 dB / 60 dB

HIGH Pass & LOW Pass (BAND Pass allowed)

(20 ÷ 175Hz) & (50 ÷ 300Hz)

12 dB/oct - 0.7 (Stereo & Mono)

88 °C ($\pm 5^{\circ}$ C)

55 °C ($\pm 5^{\circ}$ C)

168 / 228

163 / 221

114 / 160

24.5 mOhm / 18.1 mOhm

1 Ohm / 2 Ohm (Stereo / Bridged)

150 A (Internal)

(* 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

1 Ohm ST or 2 Ohm BTL – MUSICAL SIGNAL – speaker load only