

ONE 240.2

[Rev. 2.0 - 2012/04]

2-channel AB class amplifier

CEA-2006-A SPECIFICATIONS

POWER RATING: 230 Watt per channel @ 4 Ohm < 1% THD+N
SN RATIO: >77 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:
230 Watt x 2 - ST @ 4 Ohm
340 Watt x 2 - ST @ 2 Ohm
680 Watt x 1 - BTL @ 4 Ohm

EFFECTIVE POWERS:
233 Watt (180 Watt @12V6) x 2 @ 4 Ohm / ST mode / 1% THD / 1KHz - **51.0 A** ($\eta = 63.5 \%$)
345 Watt (266 Watt @12V6) x 2 @ 2 Ohm / ST mode / 1% THD / 1KHz - **86.8 A** ($\eta = 55.2 \%$)
690 Watt (532 Watt @12V6) x 1 @ 4 Ohm / BTL mode / 1% THD / 1KHz - **86.8 A** ($\eta = 55.2 \%$)

THD @ 4 Ohm / ST mode: < **0.02 %** (1KHz / 90% Power rating ref)
THD @ 2 Ohm / ST mode: < **0.02 %** (1KHz / 90% Power rating ref)
DIM @ 4 Ohm / ST mode: < ---- % (Power rating ref)
DIM @ 2 Ohm / ST mode: < ---- % (Power rating ref)

DC-DC converter typology: Unregulated
Conversion frequency: 45 KHz ($\pm 6 \%$)
Absolute maximum operation supply voltage range: 10.5 V ÷ 15 V
Recommended operation supply voltage range: 11 V ÷ 14.4 V
Power-on/Power-off Voltage Threshold: 9.5 V / 8.0 V
Mute delay time: 3 secs
Secondary voltages (Amp. / Driver / Pre.): ± 50.8 V / ± 13.8 V / ± 15.2 V
Max output offset voltage (each channel): ± 15 mV
Standby current: < **0.1 mA (typical)**
Quiescent consumption @ 12V6 / 14V4: 0.77 A / 0.84 A (no idle current regulation)
Idle current regulation @ 14V4 (no signal): 0.08 A
Quiescent consumption @ 12V6 / 14V4: 0.83 A / 0.92 A (with idle current set)
Thermal protection consumption: 0.2 A
Battery ground vs secondary ground decoupling: 1K Ohm
Body ground vs battery ground decoupling: 68 Ohm
Bandwidth (-3dB ÷ 1 Watt): < 5 Hz ÷ 100 KHz
Input sensitivity (Power rating ref): 0.4 Vrms ÷ 8 Vrms
Input impedance @ 1 KHz (STEREO input): 11 Kohm [Low Level] / 33R [High Level]
Input capacitance @ 1 KHz (STEREO input): 220 pF [Low Level] / 10 nF [High Level]
Input ground decoupling: 33R [Low Level] / 50 Kohm [High Level]
S/N ratio (AP filter 10 Hz - 500 KHz) – Power rating ref: 83 dB
S/N ratio (AP filter 10 Hz - 22 KHz) – Power rating ref: 100 dB (“A” weighted)
Eq. Input noise (AP filter 10 Hz - 500 KHz): 12.6 uV
Eq. Input noise (AP filter 10 Hz - 22 KHz): 2.3 uV (“A” weighted)
Channel separation @ 100Hz / 1KHz / 10KHz – 10 Watt ref: 76 dB / 75 dB / 64 dB
Features: HIGH Pass or LOW Pass (45 ÷ 225Hz - 12dB/oct)
Remote Volume Control (low pass only) (-12dB ÷ 0dB)
Front Stage Adjuster (onboard)
High Low Adapter (onboard, auto switch-on)
88 °C ($\pm 5^{\circ}$ C)
55 °C ($\pm 5^{\circ}$ C)
117 / 120
116 / 117
104 / 114
2 Ohm / 4 Ohm (Stereo / Bridged)
2x40 A (onboard)

(*) **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