

# F2>400 (IV) PRODUCT SPECIFICATIONS [Rev. 0 - Last update: 2006/07/10]

## CEA-2006-A SPECIFICATIONS

POWER RATING: **170 Watts per channel @ 4 Ohms < 1% THD+N**  
SN RATIO: **>87 dBA (reference: 1 Watt into 4 Ohms)**

## GT Trading SPECIFICATIONS (Tcase = 25 °C / 4 Ohms stereo / 0.17V input level if not otherwise specified)

### POWER RATINGS:

170Watts per channel @ 4 Ohms < 0.3% THD+N  
280Watts per channel @ 2 Ohms < 0.3% THD+N  
600Watts BTL mode @ 4 Ohms < 0.3% THD+N  
850Watts BTL mode @ 2 Ohms < 0.3% THD+N

Power output @ 4 Ohm / 14V4 / 1KHz / STEREO / 0.3% THD:

170 W x 2– 35.5A – 69.2 % efficiency

Power output @ 2 Ohm / 14V4 / 1KHz / STEREO / 0.3% THD:

280 W x 2– 57 A – 60.4 % efficiency

Power output @ 4 Ohm / 14V4 / 1KHz / BRIDGE / 0.3% THD:

600 W x 1– 59 A – 60.4 % efficiency

THD @ 4 Ohm / 14V4 / STEREO:

< 0.04 % (1KHz / Power rating ref)

THD @ 2 Ohm / 14V4 / STEREO:

< 0.04 % (1KHz / Power rating ref)

THD @ 4 Ohm / 14V4 / BRIDGE:

< 0.04 % (1KHz / Power rating ref)

DIM @ 4 Ohm / 14V4 / STEREO:

< 0.01 % (Power rating ref)

DIM @ 2 Ohm / 14V4 / STEREO:

< 0.02 % (Power rating ref)

DIM @ 4 Ohm / 14V4 / BRIDGE:

< 0.02% (Power rating ref)

### DC-DC converter typology:

Unregulated

Conversion frequency:

40 KHz (± 6 %)

Absolute maximum operation supply voltage range:

10 V ÷ 16 V

Recommended operation supply voltage range:

11 V ÷ 14.4 V

Undervoltage cutoff Threshold:

8.5 V

Mute delay time:

3 secs.

Secondary voltages (Amp. / Driver / Pre.) @ 14.4 Volt:

±39 V / ±7.5 V / ±14.8 V

Max output offset voltage (each channel):

±20 mV

Standby current @ 14.4 Volt:

< 2 mA

Quiescent consumption @ 12.6 Volt / 14.4 Volt:

0.49 A / 0.54 A (no idle current regulation)

Idle current regulation @ 14.4 Volt (4 Ohm STEREO - no signal):

0.1 A (each channel)

Quiescent consumption @ 12.6 Volt / 14.4 Volt:

0.65 A / 0.74 A (with 0.2 A total idle current regulation)

Thermal protection consumption @ 14.4 Volt:

0.67 A

Battery ground vs secondary ground decoupling:

R.C.D. network (56R // 100n // double clamp diodes)

Body ground vs battery ground decoupling:

R.C. network (100R // 100n)

Bandwidth (-3dB ÷ 1 Watt) @ 14.4 Volt (4 Ohm STEREO):

5 Hz ÷ 150 KHz

Input sensitivity @ 14.4 Volt (4 Ohm STEREO) – Power rating ref:

0.17 V ÷ 4.3 V

Input impedance @ 1 KHz (STEREO input):

11 KOhm

Input capacitance @ 1 KHz (STEREO input):

220 pF

Input ground decoupling:

R.C. network (15R // 100n)

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

91 dB

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

107 dB (“A” weighted)

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

4.8 uV

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

0.76 uV (“A” weighted)

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

88 dB / 74 dB / 57 dB

Xover functions:

HIGH Pass & LOW Pass (BAND Pass allowed)

(20 ÷ 150Hz) & (45 ÷ 300Hz)

12 dB/oct - 0.6 (Stereo & Mono)

Filter slope - Filter “Q”:

88 °C (±5°C)

Thermal cutoff Threshold:

50 °C (±5°C)

INTELLISPEED® start Threshold:

391 / 299 (Right / Left)

Damping factor @ 100 Hz (4 Ohm STEREO) - 10 Watt ref:

458 / 335 (Right / Left)

Damping factor @ 1 KHz (4 Ohm STEREO) - 10 Watt ref:

290 / 219 (Right / Left)

Damping factor @ 10 KHz (4 Ohm STEREO) - 10 Watt ref:

8.7 mOhm / 11.9 mOhm (Right / Left)

Output impedance @ 1 KHz (4 Ohm STEREO) - 10 Watt ref:

1 Ohm / 2 Ohm (Stereo / Bridged)

Overload cutoff @ 14.4 Volt:

2 x 30 A (Internal)

Suggested fuse: