

CEA-2006-A SPECIFICATIONS

POWER RATING: **500 Watts per channel @ 4 Ohms < 1% THD+N**
SN RATIO: **>91 dBA (reference: 1 Watt into 4 Ohms)**

GT Trading SPECIFICATIONS (Tcase = 25 °C / 4 Ohms stereo / 0.2V input level if no otherwise specified / All channels operative)

POWER RATINGS: **500Watts per channel @ 4 Ohms < 0.3% THD+N**
850Watts per channel @ 2 Ohms < 0.3% THD+N

Power output @ 4 Ohm / 14V4 / STEREO / 0.3% THD:
Power output @ 2 Ohm / 14V4 / 1KHz / STEREO / 0.3% THD:

500 W x 1 – 35 A – 82 % efficiency
850 W x 1 – 79 A – 79 % efficiency

THD @ 4 Ohm / 14V4 / STEREO:
THD @ 2 Ohm / 14V4 / STEREO:
THD @ 4 Ohm / 14V4 / BRIDGE:
DIM @ 4 Ohm / 14V4 / STEREO:
DIM @ 2 Ohm / 14V4 / STEREO:
DIM @ 4 Ohm / 14V4 / BRIDGE:

< 0.04 % (1KHz / Power rating ref)
< 0.04 % (1KHz / Power rating ref)
< 0.04 % (1KHz / Power rating ref)
< 0.003 % (Power rating ref)
< 0.004 % (Power rating ref)
< 0.004 % (Power rating ref)

DC-DC converter typology:

Regulated, PWM

Conversion frequency:

52 KHz ($\pm 6\%$)

Absolute maximum operation supply voltage range:

10 V ÷ 16 V

Recommended operation supply voltage range:

11 V ÷ 14.4 V

Undervoltage cutoff threshold / delay time:

10 V / 60 secs.

Oversupply cutoff threshold / delay time:

16 V / 10 secs.

Mute delay time:

3 secs.

$\pm V_{CC}$ span regulation @ 14.4 Volt:

54 V

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

$\pm 27 \text{ V} / \pm 4.4 \text{ V} / \pm 14.7 \text{ V}$

Max output offset voltage (each channel):

$\pm 20 \text{ mV}$

Standby current @ 14.4 Volt:

< 1 mA (0.7 mA typ.)

Quiescent consumption @ 12.6 Volt / 14.4 Volt:

0.9 A / 0.82 A (no idle current regulation)

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

0.1 A per channel

Quiescent consumption @ 12.6 Volt / 14.4 Volt:

1.34 A / 1.22 A (with 0.4 A total idle current regulation)

Thermal protection consumption @ 14.4 Volt:

0.9 A

Battery ground vs secondary ground decoupling:

R.C. network (22R * 100n)

Body ground vs battery ground decoupling:

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

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

5 Hz ÷ 500 Hz

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

0.2 V ÷ 5.3 V (0.2 V ÷ 5 V declared)

Input impedance @ 1 KHz (STEREO input):

10 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):

5.6 uV

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

0.9 uV ("A" weighted)

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

83 dB / 79 dB / 65 dB

Xover functions:

Same features for Section A & Section B;

Filter slope - Filter "Q":

HIGH Pass (15Hz – 500Hz) or LOW Pass (50Hz – 4000Hz)

Thermal cutoff / recovery Threshold:

12 dB/oct - 0.7

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

90 / 70 °C

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

525 / 1585 (R/L section A) ÷ 488 / 1604 (R/L section B)

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

527 / 1272 (R/L section A) ÷ 530 / 1608 (R/L section B)

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

331 / 488 (R/L section A) ÷ 334 / 642 (R/L section B)

Overload cutoff @ 14.4 Volt:

7.6 mOhm / 3.1 mOhm & 7.5 mOhm / 2.5 mOhm

Current consumption @ 2 Ohms / 12.6 Volt / STEREO:

2 Ohm / 4 Ohm (Stereo / Bridged)

Suggested fuse:

79A (Power rating ref)

80A

(*) Input signal: 100Hz, Burst 40 cycles, Interval 120 cycles, 0% Low level. Power measured after 10 cycles.