

K1 | 2500 PRODUCT SPECIFICATIONS [Rev. 0 - Last update: 2015-09-01]

CEA-2006-A SPECIFICATIONS

POWER RATING: **750 Watts one channel @ 4 Ohms < 1% THD+N**
SN RATIO: **>89 dBA (reference: 1 Watt into 4 Ohms)**

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

POWER RATINGS: **750 Watts one channel @ 4 Ohms < 0.3% THD+N**
1800 Watts one channel @ 2 Ohms < 0.3% THD+N
2500Watts^(*) one channel @ 1 Ohms < 0.3% THD+N

Power output @ 4 Ohm / 14V4 / 100Hz / STEREO / 0.3% THD:
Power output @ 2 Ohm / 14V4 / 100Hz / STEREO / 0.3% THD:
Power output @ 1 Ohm / 14V4 / 100Hz / BRIDGE / 0.3% THD:

750 W x 1 – 65 A – 82 % efficiency
1800 W x 1 – 110 A – 80 % efficiency
2800 W x 1 – 215 A – 80 % 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:

< 0.03 % (100Hz / Power rating ref)
< 0.04 % (100Hz / Power rating ref)
< 0.03 % (100Hz / Power rating ref)
< 0.003 % (Power rating ref)
< 0.004 % (Power rating ref)
< 0.003 % (Power rating ref)

DC-DC converter typology:

Regulated, PWM

Conversion frequency:

125 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 / delay time:

10 V / 60 secs.

Overvoltage cutoff Threshold / delay time:

16 V / 10 secs.

Mute delay time:

3 secs.

±Vcc span regulation @ 14.4 Volt:

75 V

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

±31.25 V / ±4.3 V / ±14.9 V

Max output offset voltage (each channel):

±20 mV

Standby current @ 14.4 Volt:

< 1 mA (0.7 mA typ.)

Quiescent consumption @ 12.6 Volt / 14.4 Volt:

3,5 A / 3,8 A (no idle current regulation)

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

0.1 A per channel

Quiescent consumption @ 12.6 Volt / 14.4 Volt:

0.91 A / 0.8 A (with 0.2 A total idle current regulation)

Thermal protection consumption @ 14.4 Volt:

0.75 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 STEREO):

5 Hz ÷ 5000 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:

89 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):

7.1 uV

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

0.9 uV (“A” weighted)

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

106 dB / 87 dB / 67 dB

Xover functions:

INPUT Passthrough;

HIGH Pass & LOW Pass (BAND Pass allowed)

Thermal cutoff / recovery Threshold:

90 / 70 °C

INTELLISPEED® start / stop / max force Threshold:

45 / 40 / 70 °C

Suggested fuse:

250A (External)

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