

# K2 | 04D PRODUCT SPECIFICATIONS [Rev. 0 - Last update: 2015-09-04]

## CEA-2006-A SPECIFICATIONS

POWER RATING: **500 Watts per channel @ 4 Ohms < 1% THD+N**  
SN RATIO: **>85 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:

500 Watts per channel @ 4 Ohms < 0.3% THD+N  
900 Watts per channel @ 2 Ohms < 0.3% THD+N  
1700Watts<sup>(\*)</sup> per channel @ 1 Ohms < 0.3% THD+N  
2000 Watts BTL mode @ 4 Ohms < 0.3% THD+N  
3500 Watts<sup>(\*)</sup> BTL mode @ 2 Ohms < 0.3% THD+N

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

500 W x 2 – 40.1 A – 80 % efficiency  
900W x 2 – 100 A – 80 % efficiency  
2000W x 2 – 250 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 % (1KHz / Power rating ref)  
< 0.03 % (1KHz / Power rating ref)  
< 0.03 % (1KHz / Power rating ref)  
< 0.005 % (Power rating ref)  
< 0.006 % (Power rating ref)  
< 0.006 % (Power rating ref)

### DC-DC converter typology:

#### Conversion frequency:

### Regulated, PWM

52 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:

108 V

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

±54 V / ±4 V / ±15 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:

1.2 A / 1.12 A (no idle current regulation)

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

0.35 A per channel

#### Quiescent consumption @ 12.6 Volt / 14.4 Volt:

1.96 A / 1.82 A (with 0.7 A total idle current regulation)

#### Thermal protection consumption @ 14.4 Volt:

1.9 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 STEREO):

5 Hz ÷ 40 KHz

#### 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:

78 dB

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

108 dB (“A” weighted)

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

25.2 uV

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

0.8 uV (“A” weighted)

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

90 dB / 93 dB / 71 dB

#### Xover functions:

### INPUT Passthrough:

HIGH Pass & LOW Pass (BAND Pass allowed)

(60÷80÷100÷120Hz & 60÷70÷80÷90Hz) or AQXM2 modules

12 dB/oct - 0.7/1.2 [HP] & 12 dB/oct - 0.7 [LP] (Stereo & Mono)

24 dB/oct - 0.5/1.4 [HP] & 24 dB/oct - 0.4 [LP] (Mono only)

90 / 70 °C

45 / 40 / 70 °C

#### Thermal cutoff / recovery Threshold:

#### INTELLISPEED® start / stop / max force Threshold:

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

2119 / 2132 (Right / Left)

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

2129 / 2141 (Right / Left)

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

708 / 712 (Right / Left)

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

1.9 mOhm / 1.9 mOhm (Right / Left)

#### Overload cutoff @ 14.4 Volt:

1 Ohm / 2 Ohm (Stereo / Bridged)

#### Current consumption @ 2 Ohms / 12.6 Volt / STEREO:

163 A (Power rating ref)

#### Suggested fuse:

175 A (External)

(\*) Input signal: 1KHz, Burst 40 cycles, Interval 120 cycles, 0% Low level. Power measured after 10 cycles.