

ONE 1000.1D

Warm Digital Sound

Single Channel Class-D Amplifier

[Rev. 3.0 - 2013/09]

CEA-2006-A SPECIFICATIONS

POWER RATING: 554 Watt per channel @ 4 Ohm < 1% THD+N
SN RATIO: >80 dBA (reference: 1 Watt into 4 Ohm)



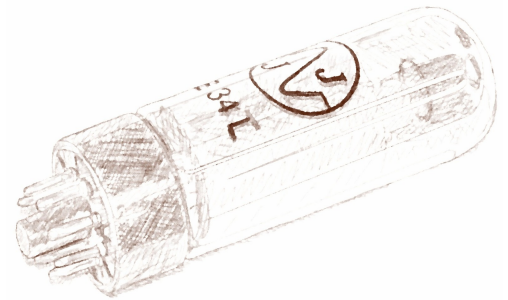
MOS SPECIFICATIONS (Tcase = 25 °C / 4 Ohm / 0.2V input level @ 14.4 Volt / WATT RMS if not otherwise specified)

TARGET POWERS:
600 Watt x 1 @ 4 Ohm
1000 Watt x 1 @ 2 Ohm

EFFECTIVE POWERS:
667 Watt (499 Watt @12V6) x 1 @ 4 Ohm / 3% THD / 80Hz - **55.9 A** (η = 82.9 %)
1048 Watt (792 Watt @12V6) x 1 @ 2 Ohm / 3% THD / 80Hz - **97.8 A** (η = 74.4 %)

DC-DC converter typology:
Conversion frequency:
D class stage carrier:
Absolute maximum operation supply voltage range:
Recommended operation supply voltage range:
Power-on/Power-off Voltage Threshold:
Mute delay time:
Secondary voltages (Rail / Serv.) @ 12V6:
Max output offset voltage:
Standby current:
Quiescent consumption @ 12V6 / 14V4:
Thermal protection consumption:
Battery ground vs secondary ground decoupling:
Body ground vs battery ground decoupling:
Bandwidth (-3 dB 20 Watt 2 Ohm):
Input sensitivity (Power rating ref):
Input impedance @ 1 KHz (STEREO input):
Input ground decoupling:
S/N ratio (AP filter 10 Hz - 22 KHz) – Power rating ref:
Eq. input noise (AP filter 10 Hz - 22 KHz):

Unregulated
45 KHz (± 6 %)
220 KHz (typical)
10.5 V ÷ 15 V
11 V ÷ 14.4 V
9.5 V / 8.0 V
3 secs
±70.1 V / ±15.0 V
±100 mV
< 0.1 mA (typical)
1.9 A / 2.1 A
0.2 A
1K Ohm
Capacitive network
20 Hz ÷ 280 Hz
0.2 Vrms ÷ 4 Vrms (LOW level) / 0.5 Vrms ÷ 10 Vrms (HIGH level)
11 KOhm [Low Level] / 47 Ohm [High Level]
47 Ohm [Low Level] / 50 KOhm [High Level]
107 dB (“A” weighted)
1.12 uV (“A” weighted)



Features:
HIGH Pass & LOW Pass (always on)
[HP: 20 ÷ 100 Hz & LP: 40 ÷ 280 Hz - (24 dB/oct)]
Remote Volume Control
(-12 dB ÷ 0 dB)
Phase Shift (always on)
0 ÷ 360°
High Low Adapter (onboard, auto switch-on)
OFF / BTL / SE
Low Level Output (full range)

Thermal cutoff Threshold: 88 °C (±5°C)
Cooling Fan Temperature Threshold: 55 °C (±5°C)
Damping factor @ 80Hz ÷ 10Wrms: 30 (kept low by design)
Load drive limitations (*): 2 Ohm (1 Ohm nominal speaker impedance admitted)
Suggested fuse: 4 x 30 A (onboard)

(*) VERY IMPORTANT NOTE - READ CAREFULLY

4 Ohm – CONTINUOUS SINEWAVE SIGNAL – pure resistive load or speaker load
2 Ohm – MUSICAL SIGNAL – pure resistive load or speaker load

