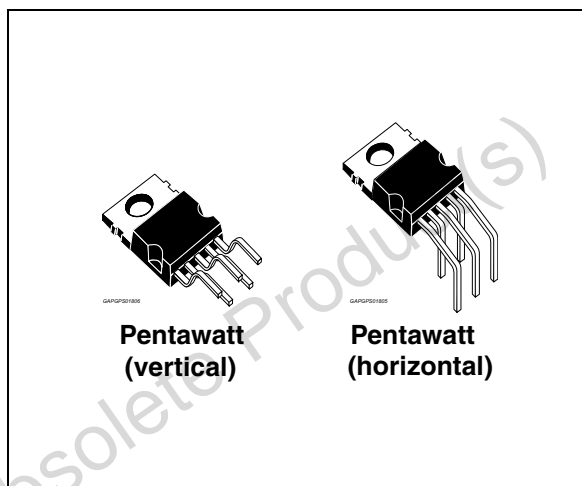


Features

- Low distortion
- Protection against:
 - DC and AC short circuits to ground
 - Overrating chip temperature
 - Load dump voltage surge
 - Fortuitous open ground
 - Very inductive loads
- Ease of assembly
- Cost and space savings

Description

The TDA2003LG is a single channel class AB power amplifier which provides a high output current capability (up to 3.5 A) with very low harmonic and crossover distortion.



This power amplifier is protected against DC and AC short circuits between all pins and ground, fortuitous open ground, load dump surge up to 40 V and thermal over-range.

Table 1. Device summary

Order code	Package	Packing
TDA2003VLG	Pentawatt (vertical)	Tube
TDA2003HLG	Pentawatt (horizontal)	Tube

Contents

1	Schematic, test circuits and pins connections diagrams	3
2	Package information	5
3	Revision history	7

Obsolete Product(s) - Obsolete Product(s)

1 Schematic, test circuits and pins connections diagrams

Figure 1. Schematic diagram

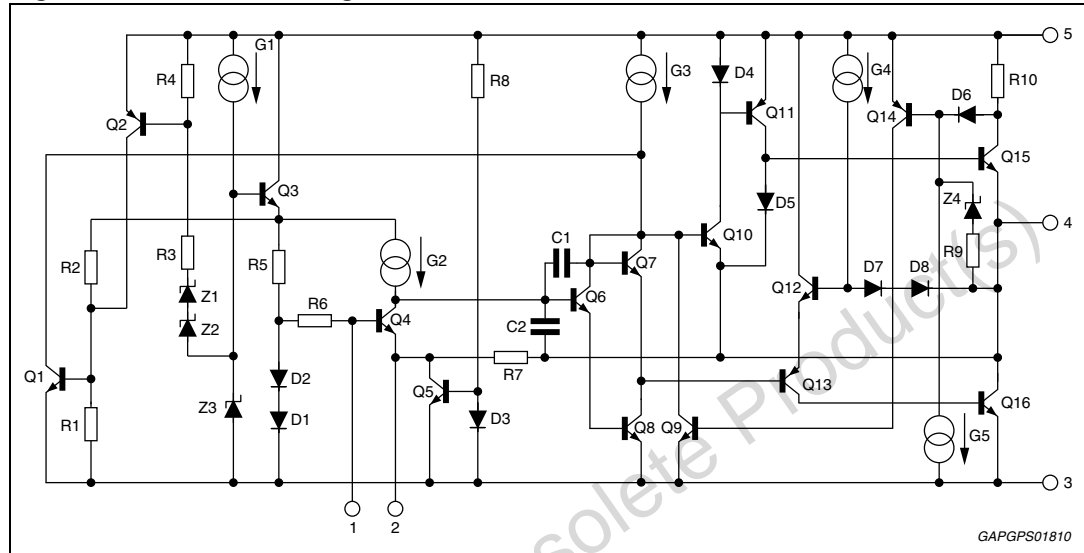


Figure 2. DC test circuit

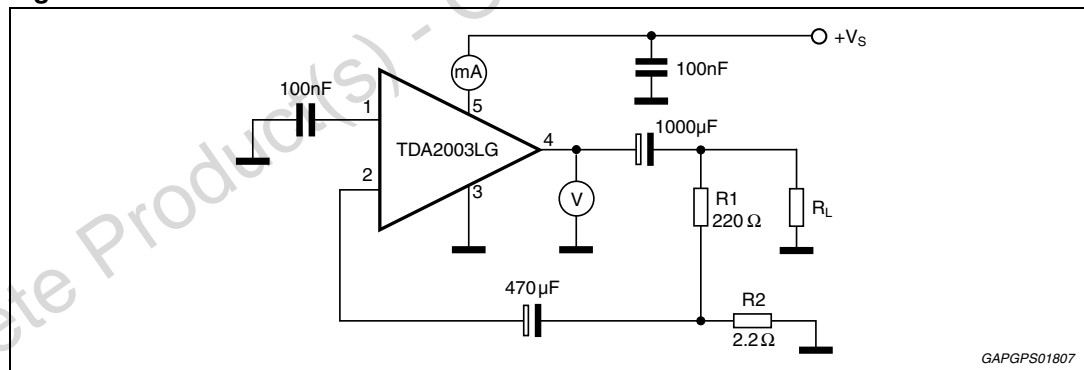
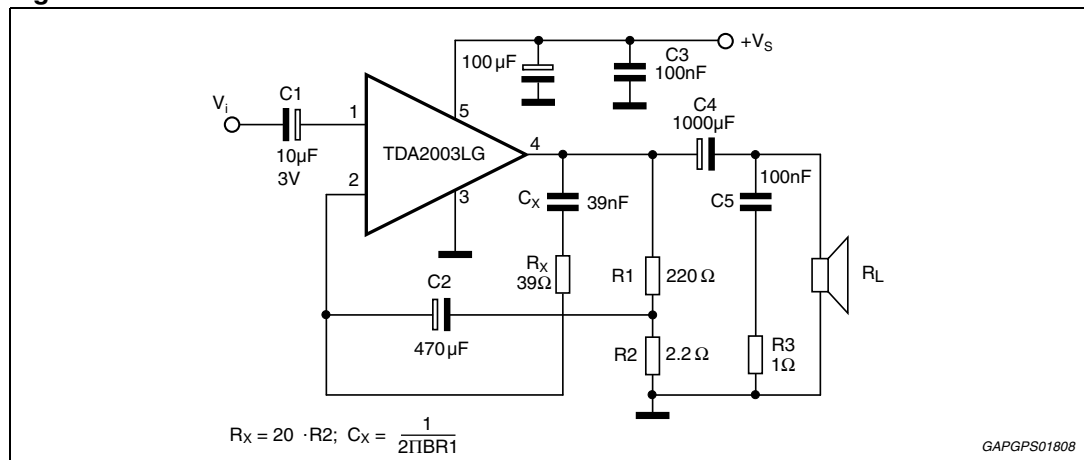
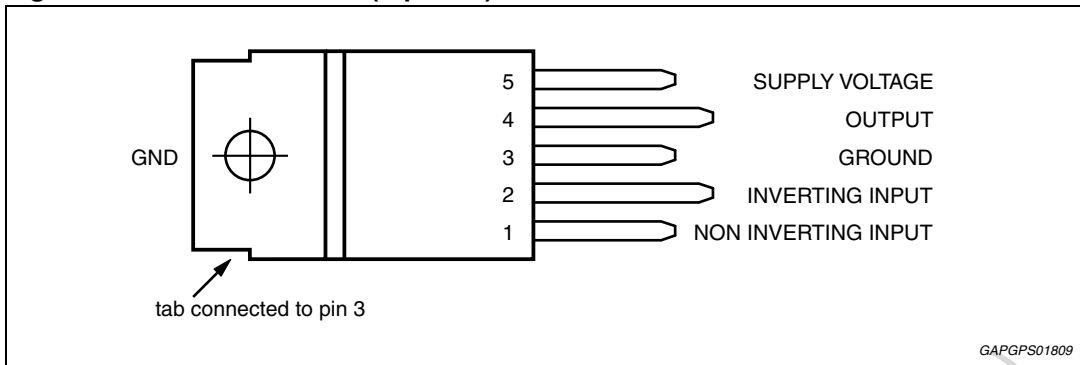


Figure 3. AC test circuit



$$R_x = 20 \cdot R_2; C_x = \frac{1}{2fTBR1}$$

Figure 4. Pins connection (top view)



Obsolete Product(s) - Obsolete Product(s)

2 Package information

In order to meet environmental requirements, ST offers these devices in different grades of ECOPACK® packages, depending on their level of environmental compliance. ECOPACK® specifications, grade definitions and product status are available at: www.st.com.

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Figure 5. Pentawatt (vertical) mechanical data and package dimensions

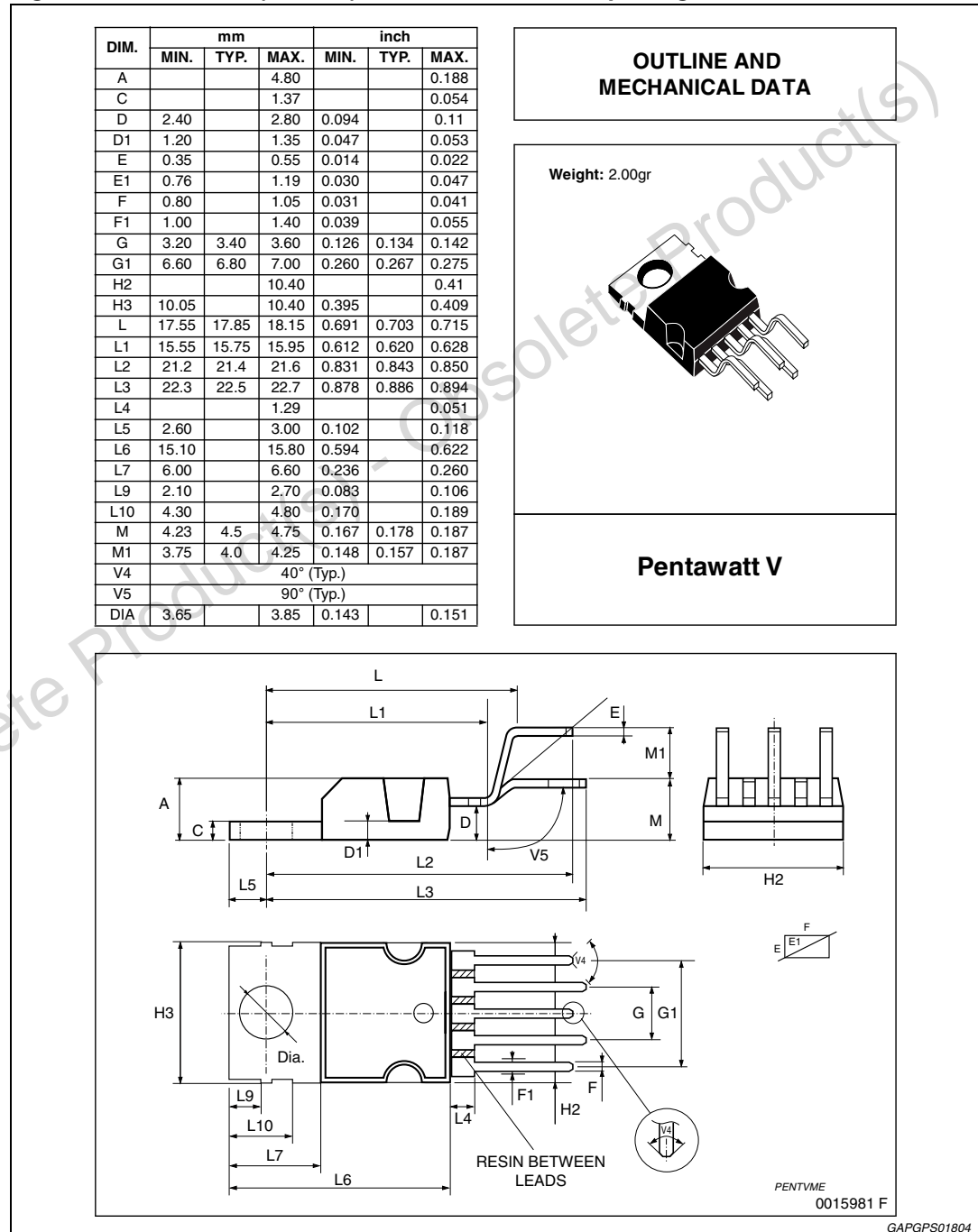
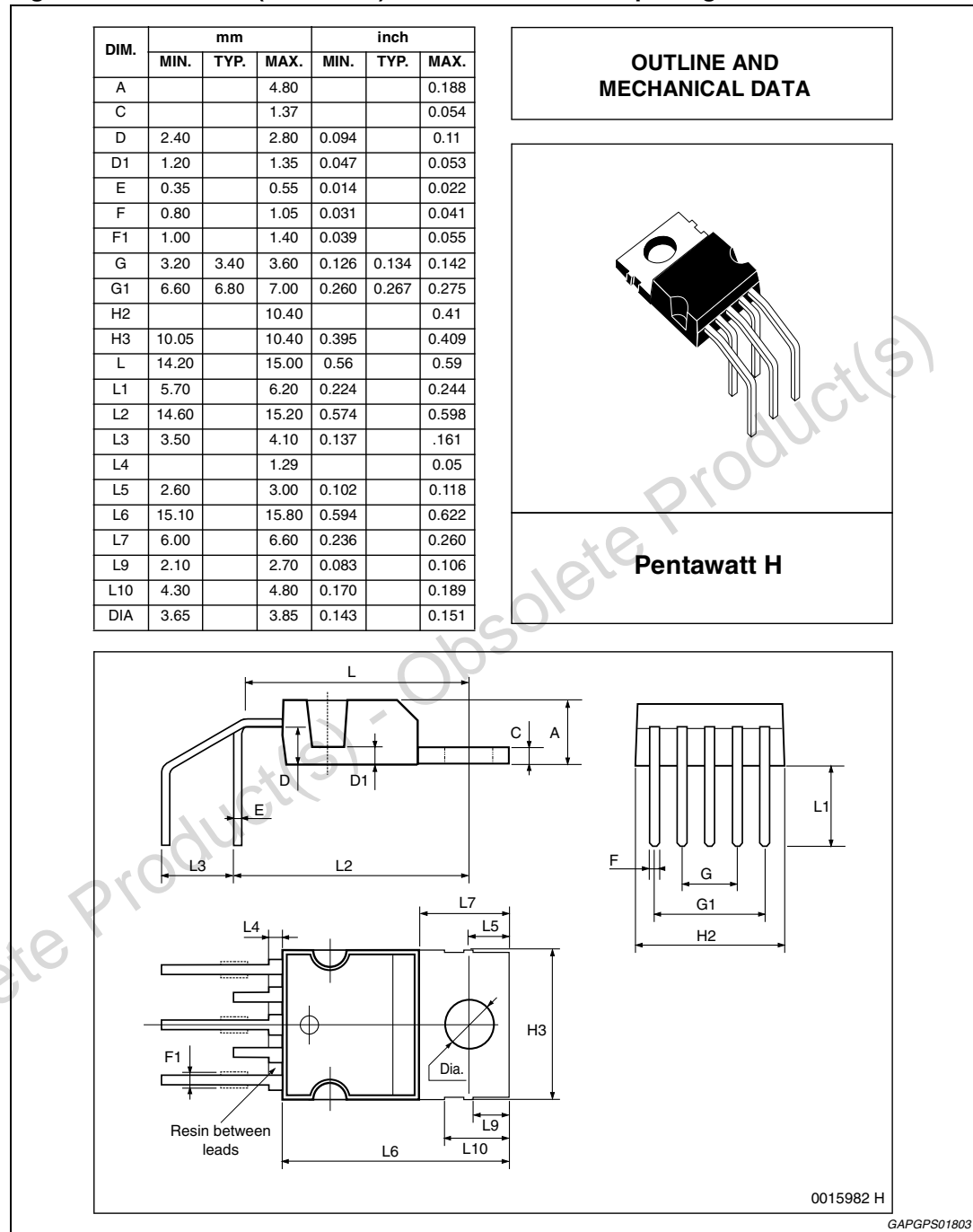


Figure 6. Pentawatt (horizontal) mechanical data and package dimensions



3 Revision history

Table 2. Document revision history

Date	Revision	Changes
25-Jul-2012	1	Initial release.
18-Sep-2013	2	Updated Disclaimer.

Obsolete Product(s) - Obsolete Product(s)

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