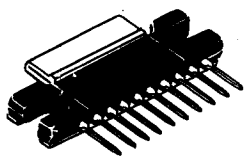
HA1366W/WR

5.5W AUDIO POWER AMPLIFIER

Hitachi HA1366W/HA1366WR is a class-B power amplifier designed especially for car radios and car stereo amplifiers encapsulated in a plastic single-in-line package, and is capable of driving low impedance loads down to 2 ohms.

The HA1366W/HA1366WR provides an output power of 5.5 watts to 4 ohm load with 10 percent distortion at 13.2 volts, and also 6.6 watts to 4 ohm load with 10 percent distortion at 14.4 volts.

It exhibits high output current capability up to 4.5 amperes, very low harmonic distortion and cross-over distortion.

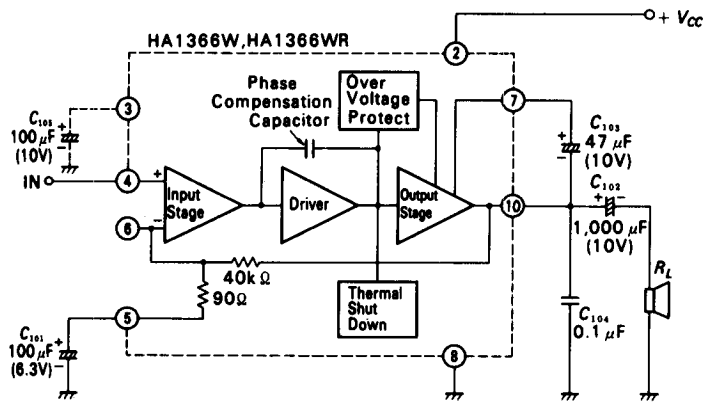


(SP-10TA)

■ FEATURES

- Two kinds of pin configulation are available: normal (HA1366W) and reverse (HA1366WR) for easier layout design of pc-board when used in stereo applications
- Only a few number of external components:
  ----- three electrolithic capacitors
  ----- one polyester film capacitor
- Easy to mount a chassis by heat-sink, due to the single-in-line package with no electrical isolation
- Thermal shut-down circuit provided:
  If the chip temperature reaches 150°C, the output power and current drain are automatically reduced to maintain the device safely.
- Overvoltage handling capability up to 40 volts for 200 msec pulse duration
- No damage for reverse insertion on the pc-board
- Using BTL connection, output power of 13 watts at 10 percent distortion is obtained with 4 ohm load at 13.2 volts.

■ BLOCK DIAGRAM AND TYPICAL APPLICATION CIRCUIT



Notes:
1. Terminals 1 and 9 have no conneciton.
2. Recommended capacitor for C_{104} is a non-inductive polyester film type or the equivalent.
3. When the shock noise occuring on suppling the power is to be reduced, the addition of C_{105} (100μF) is desirable.
   However, C_{101} is changed to 47μF when the C_{105} is used.
4. The terminal 6 is for gain adjustment. When a resistor is connected between pin 6 and 5, G_V comes higher. When a resistor and a capacitor are series connected between pin 6 and 10, G_V is reduced. Lower G_V than 40 dB is not recommended.