

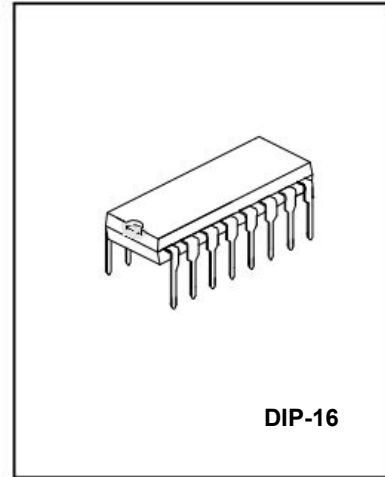
2.5W * 2 Audio amplifier

STEREO AUDIO AMPLIFIER DESCRIPTION

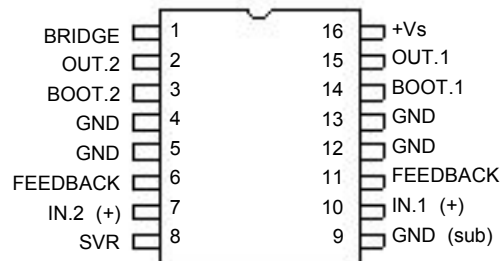
The TEA2025 is a monolithic integrated audio amplifier in a 16-pin plastic dual in line package. It is designed for portable cassette players and radios.

FEATURES

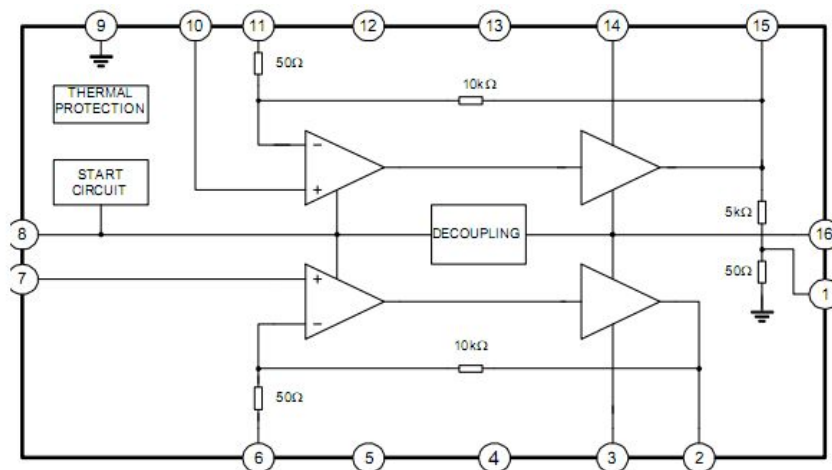
- * Working Voltage down to 3V
- * Few External components
- * High Channel isolation
- * Voltage gain up to 45dB(Adjustable with external resistor)
- * Soft clipping
- * Internal Thermal protection



PIN CONFIGURATIONS



BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS

| PARAMETER | SYMBOL | VALUE | UNIT |
|----------------------|--------|------------|------|
| Supply Voltage | Vs | 15 | V |
| Output Peak Current | Io | 1.5 | A |
| Junction Temperature | Tj | 150 | °C |
| Storage Temperature | Tstg | -40 ~ +150 | °C |

ELECTRICAL CHARACTERISTICS (Ta=25°C,Vcc=9V,Stereo,Unless otherwise specified)

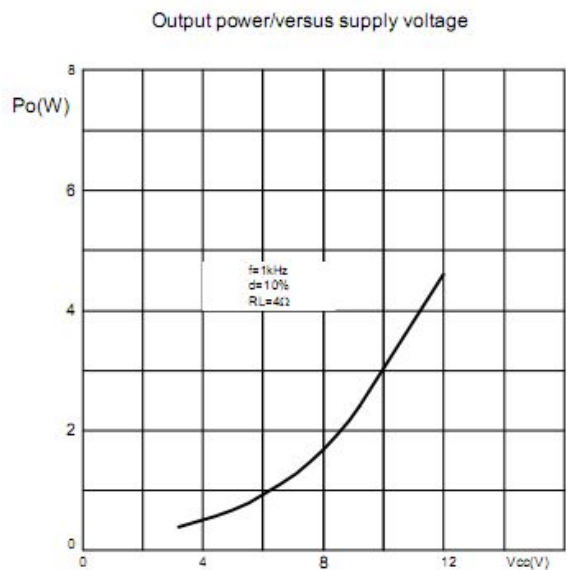
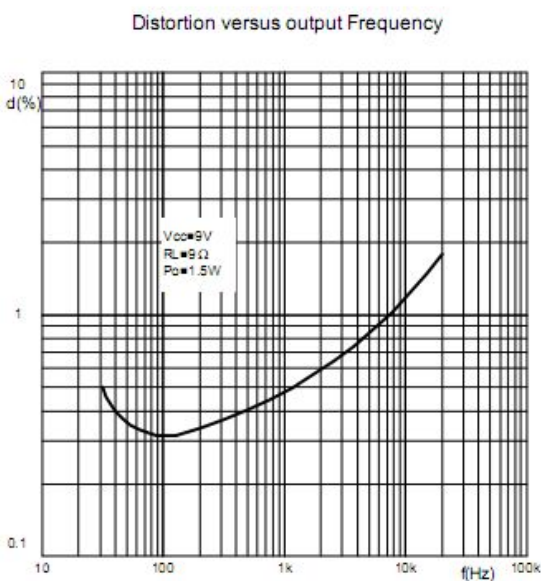
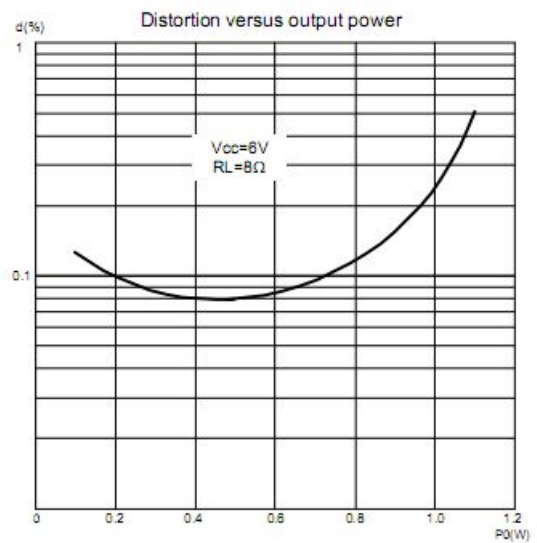
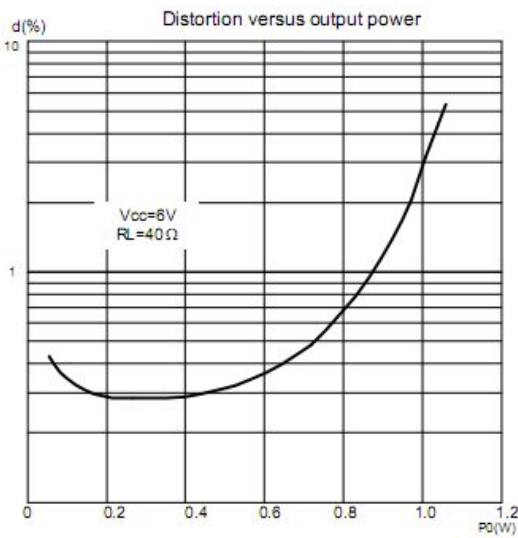
| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|--------------------------|--------|---|-----|------------|--------|------|
| Supply Voltage | Vs | | 3 | | 12 | V |
| Quiescent Current | Iq | | | 40 | 50 | mA |
| Quiescent output voltage | Vo | | | 4.5 | | V |
| Voltage gain | Av | Stereo | 43 | 45 | 47 | dB |
| | | Bridge | 49 | 51 | 53 | |
| Voltage gain difference | ΔAv | | | | ±1 | dB |
| Input impedance | Ri | | | 30 | | kΩ |
| Output Power | Po | f=1kHz;d=10% Stereo per channel Vcc=9V;RL=4Ω RL=8Ω | 1.7 | 2.3 1.3 | | |
| | | Vcc=6V;RL=4Ω RL=8Ω | 0.7 | 1 0.6 | | W |
| | | Vcc=3V;RL=4Ω | | 0.1 | | |
| | | Bridge Vcc=9V;RL=8Ω | | 4.7 | | |
| | | Vcc=6V;RL=4Ω | | 2.8 | | |
| Distortion | d | Vcc=9V;RL=4Ω f=1kHz;Po=250mW Stereo | | 0.3 | 1.5 | % |
| | | Bridge | | 0.5 | | |
| Supply voltage Rejection | SVR | Rg=0;Av=45dB Vripple=150mVRMS Fripple=100Hz | 40 | 46 | | dB |
| Input noise Voltage | Vn | Av=200 Bandwidth: 20Hz to 20kHz Rg=0 Rg=10kΩ | | 1.5 3 | 3 6 | μV |
| Cross-Talk | C.T. | Rg=10kΩ; f=1kHz;RL=4Ω Po=1W | 40 | 55 | | dB |

THERMAL RESISTANCE

Rth(j-c): Junction to case thermal resistance 15°C/W

Rth(j-a): Junction to ambient thermal resistance 60°C/W

TYPICAL PERFORMANCE CHARACTERISTICS



APPLICATION CIRCUIT

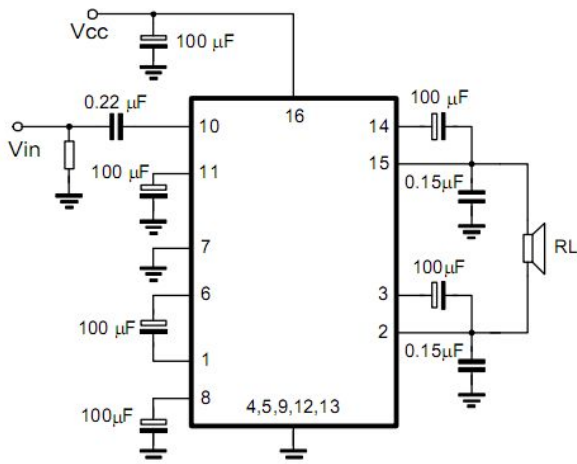


Fig. 5 Bridge Application

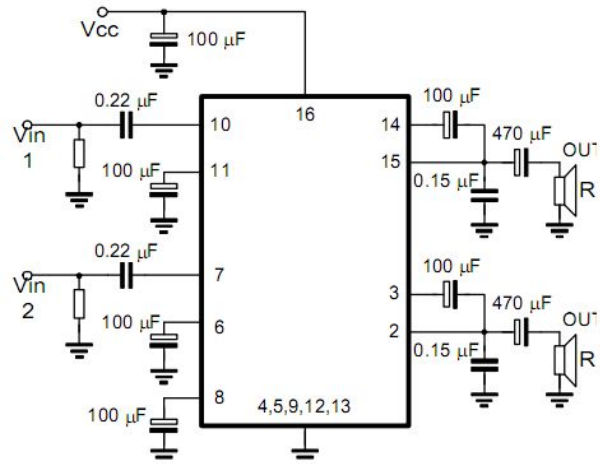
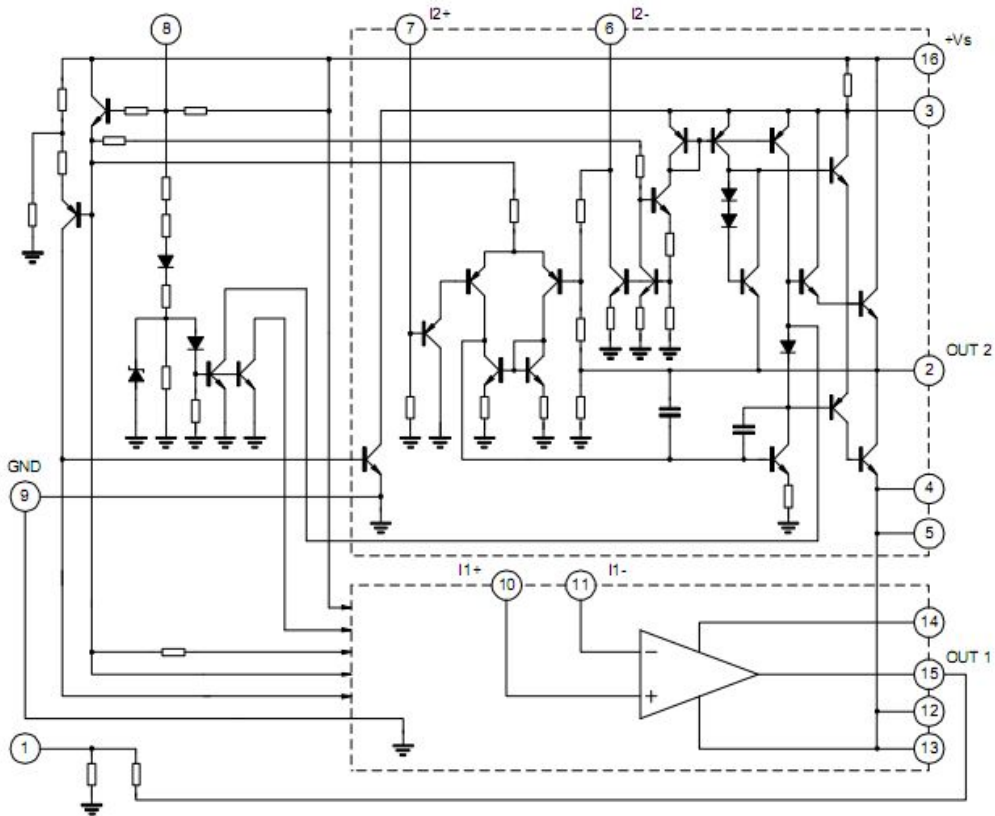


Fig. 6 Stereo Application

SCHEMATIC DIAGRAM



单击下面可查看定价，库存，交付和生命周期等信息

[>>HGSEMI\(华冠\)](#)