

MassCare Ltd

11 Waterside Way, Middlewich, Cheshire, CW10 9HP, UK

Tel/Fax: +44 (0) 1606 834954

Mobile +44 (0) 7779 607976

Email: MassCare2000@aol.com

Web: www.masscare.co.uk

Technical Information

TechnoSim DAC DA9684

MassCare Part Number MC-06472T

A pin-compatible, functionally equivalent replacement for the Digital-to Analogue Converter used in CEA Flight Simulators. This device can be used as a substitute for MN9864 and DAC349C12

The response of the device is as follows:

| Input Code | Output Voltage |
|---------------------|----------------|
| 0000 _{HEX} | +9.9951VDC |
| 7FFF _{HEX} | 0.0000VDC |
| 8000 _{HEX} | -0.0049VDC |
| FFFF _{HEX} | -10.0000VDC |

The specifications for the device are shown on the following page

SPECIFICATION:

1. Digital-to-Analogue Converter with internal voltage reference.
2. 24 Pin DIL Package. For dimensions see drawing below.
3. Temperature Rating:
 - 3.1. Operating Range: -25°C. to +80°C.
 - 3.2. Storage Range: -55°C. to +130°C.
4. Performance Characteristics:
 - 4.1 Resolution: 12-Bits
 - 4.2 Input Coding: Complimentary Offset Binary.
 - 4.3 Logic Levels: "1" Input Level: 2.0VDC Min., 5.5VDC Max.
"0" Input Level: 0.0VDC Min., 0.8VDC Max.
 - 4.4 Linearity Error +/- ¼LSB (typ); +/- ½LSB (max).
 - 4.5 Offset Error: +/- 0.05%FSR (typ); +/- 0.15%FSR (max).
 - 4.6 Power Supply Sensitivity: 0.002% FSR FOR 10% Voltage Swing.
 - 4.7 Output Current: 5mA (max).
 - 4.8 Dissipation: 300mW.
 - 4.9 Output Short Circuit Tolerance: Indefinite to Common.
 - 4.10 Settling Time: To 0.01% of FSR for FSR Change: 5uSec Max.
5. Pin Connections:

- PIN 1 - V Out
- PIN 2 - Offset Adjust
- PIN 3 - Not Connected
- PIN 4 - Not Connected
- PIN 5 - Not Connected
- PIN 6 - Gain Adjust
- PIN 7 - Not Connected
- PIN 8 - Not Connected
- PIN 9 - -15VDC Supply
- PIN 10 - +15VDC Supply
- PIN 11 - Ground
- PIN 12 - Ground
- PIN 13 - Bit 12 (LSB)
- PIN 14 - Bit 11
- PIN 15 - Bit 10
- PIN 16 - Bit 9
- PIN 17 - Bit 8
- PIN 18 - Bit 7
- PIN 19 - Bit 6
- PIN 20 - Bit 5
- PIN 21 - Bit 4
- PIN 22 - Bit 3
- PIN 23 - Bit 2
- PIN 24 - Bit 1 (MSB)

