

SPECIFICATIONS

OUTLINE DRAWING

Document
04/24/13
Control

Frequency Specifications

| | Value | Units |
|----------------------------|--------|-----------|
| Frequency range | 20-160 | MHz |
| Frequency resolution (1) | 0.1 | Hz |
| Frequency stability | ±2 | ppm/deg C |
| Frequency preload time (2) | <8 | µs |
| Frequency toggle time (3) | <80 | ns |

Amplitude Specifications

| | | |
|--|-----|------|
| RF output power, nominal for all channels on | 3.2 | Watt |
| RF output power, per channel | 0.4 | Watt |
| Modulation bandwidth (4) | >2 | MHz |
| Dynamic range (5) | >35 | dBc |
| Intermodulation (6) | >41 | dB |
| Spurious | >45 | dBc |
| Signal to noise ratio (7) | >75 | dB |

Interfaces

| | | |
|----------------------------------|--------|-------|
| RF output impedance | 50 | Ohms |
| Amplitude modulation input level | 0-10 | Volts |
| FSK modulation input level | 3.3 | Volts |
| Blanking input | 3.3 | Volts |
| Digital controls | ASC II | |
| Sensor input | ±3.3 | Volts |
| Power input, from DC supply | 24@2A | Volts |

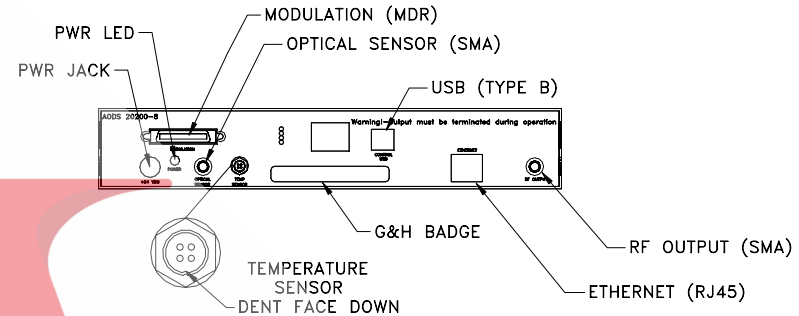
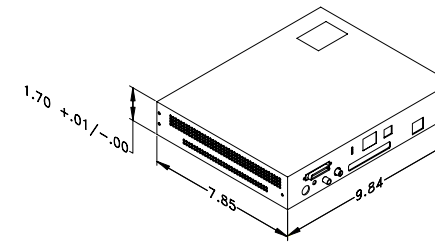
General Features

- 8 channels, combined as composite output.
- On-board composite output power measurement.
- Independent linear amplitude modulation on each channel.
- Common blanking signal for all channels.
- Independent frequency shift modulation on each channel.
- Robust command set.
- Built in Network Protocols (i.e. Point to Point Protocol PPP, Link Control Protocol LCP, Password Authentication Protocol PAP, Internet Control Message Protocol, etc.)
- Control Voltage Levels: RS232.

Comments:

1. Actually 0.0931 Hz, closest approximation to set frequency will be chosen.
2. Typically 1-8 µs, each frequency requires 32 bits, plus a starting RAM address.
3. Direct switch mode to one of three preset frequency.
4. Measured at -3 dB point, DC coupled.
5. 20-160 MHz.
6. 2 tone test, 100 MHz + 105 MHz, each of 125 mW output
7. 1 MHz measurement bandwidth, 125 mW reference tone.
8. Reference Outline Drawing 97-03926-12-15.

Code: 160T2-8SAR-24-3.2B



MDR connector

| Pin | Function | Direction | Description | Pin | Function | Direction |
|-----|----------|-----------|-------------|-----|----------|-----------|
| 1 | VCC24 | - | | 21 | VCC24 | - |
| 2 | VCC24 | - | | 22 | GND | - |
| 3 | GRD | - | | 23 | FSK0 | - |
| 4 | GND | - | | 24 | FSK1 | - |
| 5 | GND | - | | 25 | FSK2 | - |
| 6 | GND | - | | 26 | FSK3 | - |
| 7 | GND | - | | 27 | FSK4 | - |
| 8 | GND | - | | 28 | FSK5 | - |
| 9 | GND | - | | 29 | FSK6 | - |
| 10 | GND | - | | 30 | FSK7 | - |
| 11 | GND | - | | 31 | BLANK | - |
| 12 | GND | - | | 32 | GRD | - |
| 13 | MOD 0 | - | | 33 | MOD 0+ | - |
| 14 | MOD 1- | - | | 34 | MOD 1+ | - |
| 15 | MOD 2- | - | | 35 | MOD 2+ | - |
| 16 | MOD 3- | - | | 36 | MOD 3+ | - |
| 17 | MOD 4- | - | | 37 | MOD 4+ | - |
| 18 | MOD 5- | - | | 38 | MOD 5+ | - |
| 19 | MOD 6- | - | | 39 | MOD 6+ | - |
| 20 | MOD 7- | - | | 40 | MOD 7+ | - |

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| | | | | |
|---|-----|----------------------|---|--------------|
| TOLERANCES: .XX ± .01 .XXX ± .005 | DR | M.Phung 4/17/2013 | | |
| MATERIAL: | CHK | | | |
| FINISH: | APP | | DESCRIPTION: AODS Synth DDS 8 CH G&H ANALOG PLL=400MHZ | |
| | APP | | PART NUMBER: | REV: |
| | | | 97-03926-12 | A |
| | | | | SHEET 1 OF 1 |