

6502B

RF Distribution Module

Front View



Features

- Low phase noise
- High channel isolation
- Ten channel output distribution
- Daisy chain for more than 100 outputs
- CE-compliant

The Microsemi 6502B distribution module is a ten channel, RF distribution amplifier packaged in a 1U rack mount chassis. The 6502B is comprised of ten, low phase noise RF amplifiers that maintain high channel isolation (>100 dB). Up to ten units can be daisy chained together to provide up to 100 outputs. For maximum expansion, each output of one unit can be used as a source for other 6502B units to provide almost infinite expansion capability with virtually no signal degradation.

The 6502B standard configuration accepts input frequencies from 0.1 MHz to 10 MHz at 1 Vrms amplitude and provides ten buffered outputs. Each output and input has an alarm indicator that warns of either a loss of signal or insufficient amplitude.

Rear View



6502B

RF Distribution Module

Specifications

Stability

- RF output (ten)
 - Frequency 0.1 to 10 MHz
 - Level 1 Vrms (nominal)
 - Gain 1 (nominal)
 - Harmonic distortion <-40 dB
 - Non-harmonic signals <-80 dB
 - Load impedance 50 Ω
 - Isolation >100 dB
 - Connectors BNC
- Additive SSB phase noise

| Bandwidth | Offset from Carrier |
|-----------|---------------------|
| 1 Hz | -120 dB |
| 10 Hz | -135 dB |
| 100 Hz | -145 dB |
| 1 kHz | -155 dB |
| 10 kHz | -160 dB |

- RF input
 - Frequency 0.1 to 10 MHz
 - Level 1 Vrms (nominal)
- Impedance 50 Ω or Unterminated
- Alarm output
 - Summary alarm indicates failure of any output signal.
 - Each output and main Red LED
 - Non-alarm condition Relay energized (fail safe)
C Form contacts
 - Alarm output disable Panel switch
 - Connector 9 pin D-male
- Controls and indicators
 - Power Green LED, power is connected
 - Alarm Red LED, signal output failure

Note: If input level is less than 10 dBm specify low alarm threshold version (-509).

Environmental and Physical

- Temperature (operating) 0 °C to 55 °C
- Relative humidity 0 to 95%, non-condensing
- Power requirements
 - AC input (±10%) 100 - 120 VAC, <10W
180 - 240 VAC, <10W
 - DC input (optional) 22 V to 56 VDC, <10W
- Dimensions
 - Height 1U (1.75 inches) (4.44 cm)
 - Width 19" (48.26 cm)
 - Depth 12" (30.48 cm)
- Weight <5 lbs. (2.25 Kg)
- MTBF >500,000 hrs

Standards

- Safety IEC 61010-1:2010 / EN 61010-1:2010
- EMC EN61326-1 (2006) EMC Requirements for Measurement, Control and Laboratory Equipment, Class A
EN61000-3-2 (2006) +A1+A2 Harmonic Current Emissions
EN61000-3-3 (2008) Voltage Fluctuation and Flicker Emissions
- RoHS This product is exempted from the Restrictive Substance Requirements of the RoHS Directive under Category 9 (Monitoring and Control Instruments including Industrial Monitoring and Control instruments) as defined by 2011/65/EU Annex 1.

Ordering Information

| Part Number | Description |
|-------------------------------------|------------------------------|
| 14364-101 | 6502B Standard Configuration |
| 14364-104 | 6502B with option 509 |
| Contact Microsemi for availability. | |



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