

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



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6502B

RF Distribution Module

Specifications

Stability

• RF output (ten)

Frequency
Level
Gain
Harmonic distortion
Non-harmonic signals
Load impedance
Isolation
0.1 to 10 MHz
(nominal)
<-40 dB
<-80 dB
50 Ω
>100 dB

ConnectorsAdditive 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

BNC

• RF input

Frequency
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 switchConnector 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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