



## QDAX 870 Distribution Amplifier:

### Features:

- ▶ 870 MHz, 2-way models available
- ▶ GaAs technology
- ▶ Power-doubled versions provide 2.5 dBmV additional output level over conventional push-pull types while quadra-powered models provide an additional 4.5 dBmV
- ▶ Plug-in hybrids & accessories
- ▶ Variable pin diode gain & tilt controls
- ▶ Plug-in pads & EQs available at amplifier input to provide more uniform carrier-to-noise performance at all frequencies
- ▶ Includes external Class II UL approved power transformer
- ▶ 5-40 MHz 2-way return path has variable gain control with provision for plug-in pad & EQ
- ▶ Optional return amplifier is activated by inserting a return hybrid IC
- ▶ Quadra-powered amplifiers will require the QDAXRA-23L or QDAXRA-16L low current hybrid for the return amplifier
- ▶ Meets FCC CLI regulations



## QDAX 870 Specifications

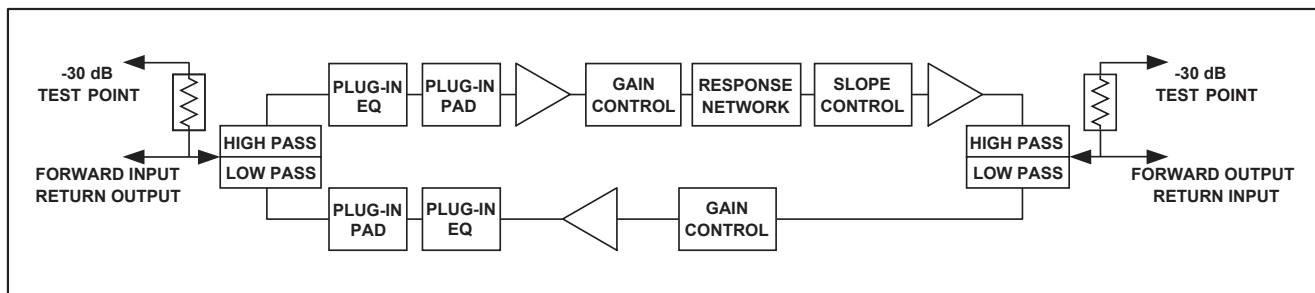
| SPECIFICATIONS  | 870   | RETURN AMP                   |
|---|---|------------------------------|
|   | Power-Doubled   |                              |
| BANDWIDTH   | 54-870 MHz  | 5-40 MHz                     |
| FREQUENCY RESPONSE  | +/- 0.5 dB  | +/- 1.5 dB                   |
| GAINS AVAILABLE (dB)  | 29, 33  | 16, 20, (23)                 |
| CHANNEL LOADING   | 128   | 6                            |
| RETURN LOSS (Worst Case)  | 14 dB   | 16 dB                        |
| GAIN CONTROL RANGE  | 5   | 6                            |
| SLOPE CONTROL RANGE   | 5   | n/a                          |
| OUTPUT LEVELS (dBmV)  | 40/35   | 48                           |
| DISTORTIONS   | CROSS MODULATION (-dB)                                  | 72, (79, (63)                |
|   | COMP. TR. BT. (-dB)                                     | 66, (70)                     |
|   | COMP. 2nd ORD. (-dB)                                    | 68, (72, (70) <sup>(2)</sup> |
| NOISE FIGURE (dB)   | 10  | 8, (6)                       |
| DC AMPERES @ 24 VDC   | 0   | 0.22, (0.13)                 |
| POWER DISSIPATION (Watts) <sup>(1)</sup>  | 27  | 8, (5)                       |
| OPERATING TEMPERATURE   | 0°C to +50°C (+32°F to +122°F)                          |                              |
| HUMIDITY  | 20%-55% (without condensation)                          |                              |
| DIMENSIONS  | 9.13H" x 7.0"W x 3.56"D<br>(23.19H x 17.78W x 9.04D cm) |                              |
| WEIGHT  | 7.5 lbs (3.4 kg)  |                              |
| NOTES:  |   |                              |
| (1) Power dissipation measured at 110V input to UL approved power transformer. DC amperes is internal voltage regulator load. |   |                              |
| (2) QDAXRA-23 specification is for discrete second order beats - not composite second order.                                  |   |                              |

## QDAX 870 Distribution Amplifier:

### Ordering Information

| Example Part Number: QDAX 870 - 33 P 2W   |  |
|---|--|
| <div style="display: flex; justify-content: space-around; width: 100%;"> <span>1</span> <span>2</span> <span>3</span> <span>4</span> </div> |  |
| 1: Frequency <sup>(1)</sup> : 870 = 870 MHz   |  |
| 2: Gain (See Specifications Table)  |  |
| 3: Output Technology: P = Power-Doubled   |  |
| 4: Amplifier Configuration: 2W = 2-way <sup>(2)</sup>   |  |
| Part Number   | Description  |
| Options & Spares  |  |
| QDAXRA-16   | 16 dB Return Amplifier   |
| QDAXRA-16L  | 16 dB Return Amplifier   |
| QDAXRA-20   | 20 dB Return Amplifier   |
| QDAXRA-23L  | 23 dB Return Amplifier   |
| QLX 870-dB  | Forward EQ Values from 0-24 dB in 2 dB steps   |
| QEE 40-dB   | Reverse EQ Value in MHz and dB Ratings   |
| SXP-**  | Plug-in Attenuator Pads, ** = 0-20 dB in 1 dB steps                                  |
| SXP Pads<br>  |  |
| #951  | 120 Volts to 26 Volts, 60 Hz AC Power Transformer, 50 VA Rating (included with QDAX) |
| #951 Transformer<br>  |  |
| <b>NOTES:</b>   |  |
| (1) Quadra-power output for 870 MHz is available on a special order basis. Call ATX for details.  |  |
| (2) All 2-way amplifiers with a forward gain of 35 dB or more require the use of QDAXRA-16 return amplifiers only.                          |  |

### Functional Schematic



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