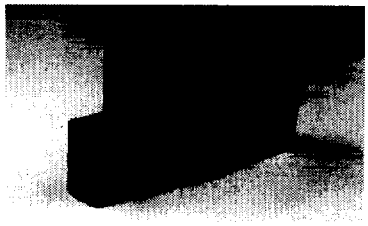
# PAW783 40-750MHz

## 13.5dB. CATV Ultra-linear Amplifier

PHOENIX MICROWAVE Corp.



## Features:

- Ultra High Linearity
- Low Noise Figure
- Rugged Construction
- Operation over wide voltage range
- Usable for 50 ohm operation

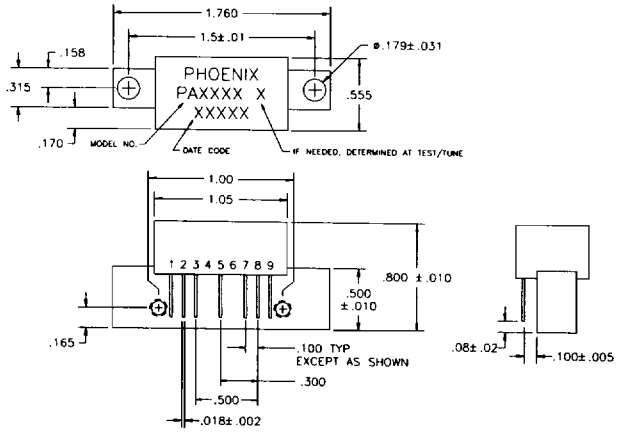
## Specifications @ Tcase = 30°C (Referenced to 75 ohms)

| Parameter | Typical Conditions | Min Value | Max. Value | Units |
|---|---|---|---|---|
| **Frequency Range** | | 40 | 750 | **MHz.** |
| **Power Gain** | f = 50MHz. | 13.5 | 14.5 | **dB.** |
| **Cable equivalent slope** | f = 40MHz. TO 750MHz. | 0 | 1.5 | **dB.** |
| **Gain Flatness ( peak to valley)** | f = 40MHz. TO 750MHz. | | ±0.2 | **dB.** |
| **Input/Output Return Loss** | f = 40 To 160 MHz. | 16 | | **dB.** |
| **Input/Output Return Loss** | f = 160 To 750 MHz. | 16 | | **dB.** |
| **Composite Triple Beat (CTB)** | 77 channels flat, Vo=44dBmV. Measured @ 547.25 MHz. | | -59 | **dB.** |
| **Cross Modulation (XMOD)** | 77 channels flat, Vo=44dBmV. Measured @ 55.25 MHz. | | -61 | **dB.** |
| **Composite 2nd Order (CSO)** | 77 channels flat, Vo=44dBmV. Measured @ 547.25 MHz.. | | -59 | **dB.** |
| **$IP_3/IP_2$** | 2 tone | 42/60 | | **dBm.** |
| **Noise Figure (NF)** | @ f = 750 MHz. | | 9.0 | **dB.** |
| **Total Current($I_{TOT}$)** | @ Voltage of +24v | | 240 | **mA.** |

## Maximum Ratings

**Storage Temperature . -40 to +100°C**
**DC Operating Voltage . . . +30.0 v.**
**Operating Base Temp. . . . +100°C**
**RF Input Voltage . . 60dBmV max.**

## Outline Drawing




## Pin Configuration

| PIN # | Description |
|---|---|
| 1 | Input |
| 2,3,7,8 | Ground |
| 5 | +V. |
| 9 | Output |
| 4,6 | not used |

**Preliminary Data Sheet**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