



DSP806

806MHz Agile PLL SAW-Filtered Digital-Analog Channel Processor



- 125 Channel Input Range
54-806 MHz (CATV 2-125, TV 2-69)
- 125 Channel Output Range 54-806MHz
(CATV 2-125, TV 2-69)
- ATSC (HDTV), QPSK, QAM, and NTSC
compatibility for CATV and terrestrial
broadcast applications provides maximum
compatibility for all signal processing
- High 45dBmV output for optimum
carrier-to-noise performance
- Microprocessor control enables digital
push-button input and output channel
selection for ease of installation, configu-
ration, and servicing
- In-band carrier-to-noise ratio >65dB
ensures superior picture quality
- SAW filtered for superior adjacent
channel performance enables drop-in
channel expansion
- Non-volatile memory for input and output
channel recall in the event of power failure
- Front panel controls and test point enable
easy setup and monitoring
- Double heterodyne conversion provides
over 60dB spurious output and channel
rejection for interference-free adjacent
channel operation
- Broadcast-quality specifications for
unparalleled data translation
- IF loop provides compatibility with CMTS,
QAM modulators and IF scramblers
- IRC and HRC input and output offset
available for frequency settings in systems
using offset channels
- Auxiliary AC outlet for convenience

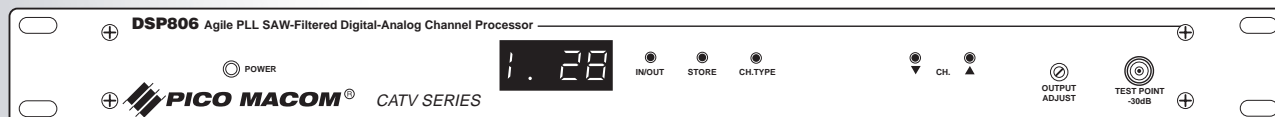
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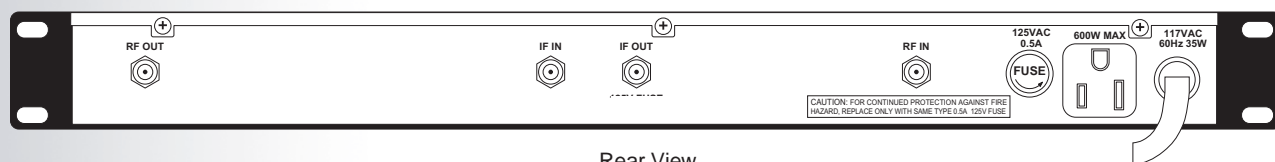
The **Pico Macom DSP806** is a frequency agile, microprocessor-controlled, professional re-broadcast grade double-heterodyne channel processor that converts one 6MHz Digital (ATSC, 8VSB, 64QAM) or Analog (NTSC) channel to a different frequency without need to demodulate and re-modulate the signal. Front panel push-button controls enable simple input and output channel selection. The unit uses state-of-the-art high stability phase-locked-loop circuitry for optimum data handling and channel relocation. The **DSP806** provides a rear panel external IF loop allowing this unit to be used as a digital up-converter or down-converter in CMTS systems. The Surface Acoustic Wave (SAW) IF filtering provides highly selective frequency cut off at band edges for superior adjacent channel performance even in the most crowded systems. The **DSP806** unique broad input AGC design delivers consistently high quality picture even at extremely low input levels. The microprocessor's non-volatile memory preserves input and output channel identification guaranteeing proper reset when power is restored. The **DSP806** high frequency and extremely high accuracy phase-locked loop oscillators enable the unit to meet the frequency offset and stability requirements of FCC Docket 21006. **Pico Macom** backs up this product with its industry leading 5-year limited warranty.

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Front View



Rear View

RF Input

Input Frequency Range: 54 - 806 MHz
 CATV Channels 2-125
 UHF Channels 2-69
AGC Range: -15 dBmV to +35 dBmV input
Impedance: 75 Ohms
Noise Figure: 8 dB
Image Rejection: >80 dB

RF Output

Output Frequency Range: 54 - 806 MHz
 CATV Channels 2-125
 UHF Channels 2-69
Output Level: 45 dBmV, adjust range 15 dB
Frequency Stability: ±5 kHz
Impedance: 75 Ohms
Flatness: ±0.2 dB
I.F. Frequency: 44 MHz SAW, digital center

General

Power Input: 105 to 130 VAC, 60 Hz, 15W
Operating Temperature: -10°C to 50°C ambient
Dimensions: 19"(L) x 9"(D) x 1 3/4"(H)
Weight: 7.9 lbs.

Ordering Information

DSP806