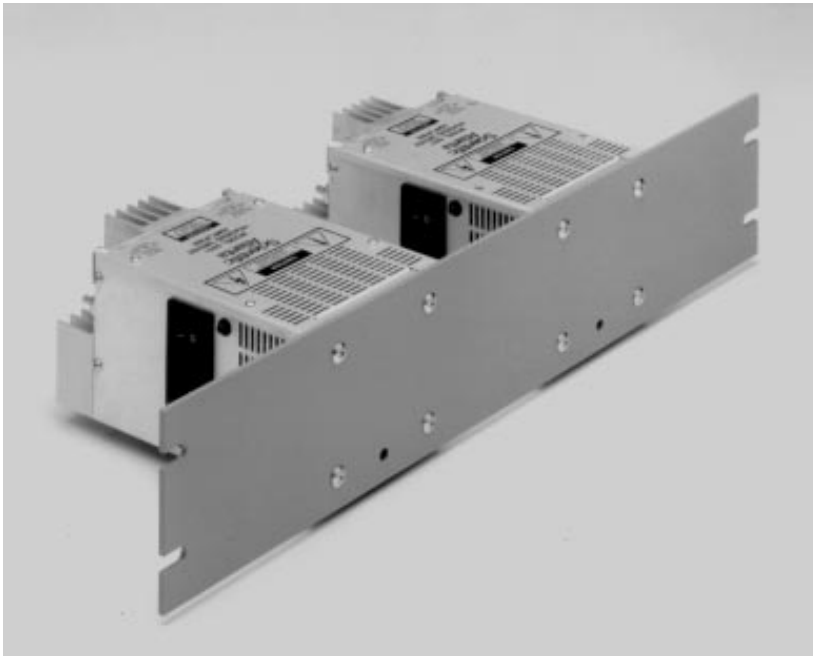


## Model 6453 (46 - 750 MHz) Headend Driver Amplifier



20046

### DESCRIPTION

The Model 6453 Headend Driver Amplifier is an indoor product designed for use in the headend or hub. It is housed in a compact (3.25 in. x 4.0 in. x 6.5 in.) module that can be attached to a pre-drilled P-3 panel for mounting in a standard headend rack. An optional pre-drilled panel is available that allows access to test points from the front of the headend rack. The parallel hybrid gain block provides optimal distortion performance at operational output levels.

The 46-750 MHz pass band ensures network flexibility for the future. The Model 6453 can be powered with most standard ac voltages and can be configured to utilize 24 V DC powering (jumper selected).

### FEATURES

- Compact size saves precious headend space
- Rack Mountable (optional P-3 panel kit)
- 46-750 MHz pass band
- 16.5 dB minimum full gain
- Output directional coupler RF test point (-20 dB)
- Plug-in pad and equalizer
- Power switch with integrated fuse
- Four models with various power requirements provide maximum flexibility
  - 100 V AC
  - 120 V AC
  - 220 V AC
  - 240 V AC
  - 24 V DC, 450 mA (optional powering for all models)



# Headend Driver Amplifier Model 6453 (46-750 MHz)

## SPECIFICATIONS

### Power Requirements

- 100 V AC, 0.20 A (Model 6453J)
- 120 V AC, 0.20 A (Model 6453)
- 220 V AC, 0.10 A (Model 6453E)
- 230 V AC, 0.10 A (Model 6453I)
- 240 V AC, 0.10 A (Model 6453B)
- +24 V DC, 450 mA
- (24 V DC operation is jumper selected)

### Power Supply

24 V DC (nominal)

### RF Test Point

-20 dB to  $\pm 1.0$  dB

### Dimensions

3.25 in. x 4.0 in. x 6.5 in.  
(8.25 cm x 10.16 cm x 16.51 cm)

### Operating Temperature (Ambient)

32°F to 120°F  
(0°C to 50°C)

### Weight

4 lb. 10 oz. (2.1 kg)

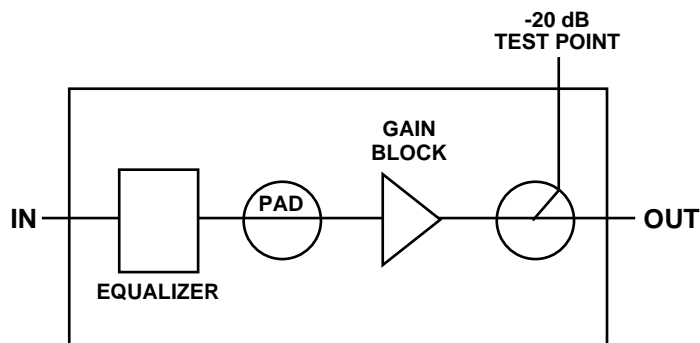
## REQUIRED ACCESSORIES

- Plug-in pad, 1 required. Available in 0.5 dB steps from 0 dB to 20.5 dB. Model PP-\* (\* denotes pad value), specify value.
- Forward Equalizer, 1 required. Available in 1.5 dB steps from 0 dB to 27 dB. Model EQ750-\* (\* denotes equalizer value), specify value.

## OPTIONAL ACCESSORIES

- Pre-drilled P-3 panel with front access test points for rack mounting, includes cable assemblies and connectors – part # 502417
- Pre-drilled P-3 panel without test point access – part #381773
- 24 V DC power cable, 10 feet – part #467080

Specifications shown reflect typical equipment performance at stated reference levels in the recommended operating configuration. Specifications are based on measurements made in accordance with NCTA Practices for Measurements on Cable Television Systems using standard frequency assignments and are referenced to 68°F (20°C).



M0694-01

Model Number	6453
Bandwidth	46-750 MHz
Gain (minimum)	16.5 dB
Flatness (frequency response)	$\pm 0.75$ dB
Return Loss	14 dB (minimum)
Noise Figure @ 46 MHz	5.2 dB max.
Noise Figure @ 550 MHz	7.8 dB max.
Noise Figure @ 750 MHz	9.3 dB max.

### 110 analog channels

Distortions <sup>1</sup> (Typical)	
Composite Triple Beat (CTB)	57.5 dB
Composite Second Order (CSO)	60.2 dB
Cross Modulation (X-MOD)	62.2 dB

### 78 analog channels

Distortions <sup>1</sup> (Typical)	
Composite Triple Beat (CTB)	66.5 dB
Composite Second Order (CSO)	65.2 dB
Cross Modulation (X-MOD)	67.2 dB

Notes:

- Distortions measured at 20°C at 44 dBmV flat
- Typical operating level in mid 30's (dBmV)

## ORDERING INFORMATION

Input Voltage	Model Number	Part Number
100 V AC	6453J	536850
120 V AC	6453	500206
220 V AC	6453E	500207
230 V AC	6453I	538498
240 V AC	6453B	500208

**NOTE: Order by part number**



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