



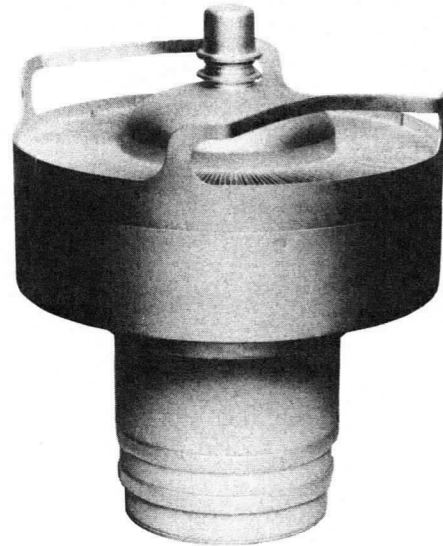
## TECHNICAL DATA

**PMS Y863**  
**VHF - TETRODE**  
**TO REPLACE**  
**8F76R**  
**DATA INCLUDES**  
**YC112**  
**RETROFIT KIT**

The EIMAC Y863 is a ceramic/metal VHF power tetrode intended for use as a retrofit for the 8F76R in VHF-TV amplifier service. A retrofit kit is available which allows use of the Y863 in NEC 10-15 kW visual TV cavities. No other changes are required. The Y863 features an electro-mechanical structure which provides high rf operating efficiency. Low losses in the structure permit operation at full ratings to 250 MHz in TV linear amplifier service.

Improved electron optics provide higher gain than the 8F76R, particularly in the high channels, easing exciter problems. Improved grid construction reduces tube-to-tube differences and contributes to extended life.

The anode is rated for 15 kilowatts dissipation with forced air cooling.



### GENERAL CHARACTERISTICS <sup>1</sup>

#### ELECTRICAL

Filament: Thoriated Tungsten Mesh

|                       |             |
|-----------------------|-------------|
| Voltage               | 7.5 ± 0.4 V |
| Current, at 7.5 volts | 120 A       |

Amplification Factor, average

|                |     |
|----------------|-----|
| Grid to Screen | 8.5 |
|----------------|-----|

Direct Interelectrode Capacitances (cath. grounded)<sup>2</sup>

|      |        |
|------|--------|
| Cin  | 170 pF |
| Cout | 16 pF  |
| Cgp  | 0.5 pF |

Direct Interelectrode Capacitances (grids grounded)<sup>2</sup>

|      |         |
|------|---------|
| Cin  | 72.5 pF |
| Cout | 17.5 pF |
| Cpk  | 0.08 pF |

|                                         |         |
|-----------------------------------------|---------|
| Maximum frequency for Full Ratings (TV) | 250 MHz |
|-----------------------------------------|---------|

1. Characteristics and operating values are based on performance tests. These figures may change without notice as a result of additional data or product refinement.
2. Capacitance values are for a cold tube, as measured with no special shielding, in accordance with Electronic Industries Association Standard RS-191.

#### MECHANICAL

Maximum Overall Dimensions:

|          |                 |
|----------|-----------------|
| Length   | 9.3 In; 23.6 cm |
| Diameter | 7.4 In; 18.8 cm |

|                          |                |
|--------------------------|----------------|
| Net Weight (approximate) | 14 Lbs; 6.4 kg |
|--------------------------|----------------|

|                    |                                |
|--------------------|--------------------------------|
| Operating Position | Axis Vertical, Base Up or Down |
|--------------------|--------------------------------|

|         |            |
|---------|------------|
| Cooling | Forced Air |
|---------|------------|

Operating Temperature, Absolute Maximum

|                                    |       |
|------------------------------------|-------|
| Ceramic/Metal Seals and Anode Core | 250°C |
|------------------------------------|-------|

|      |                  |
|------|------------------|
| Base | Special, Coaxial |
|------|------------------|

|                                                                                        |             |
|----------------------------------------------------------------------------------------|-------------|
| EIMAC Retrofit Kit, for Installation in NEC PCN-1200 VHF-TV Visual Cavity (See Page 2) | EIMAC YC112 |
|----------------------------------------------------------------------------------------|-------------|

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