



ELECTRONIC TUBE REFERENCE

F895

Power - Triode (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

Water-cooled Federal transmitting triode for RF amplification, oscillation, and Class B modulation. Rated around 40 kW plate dissipation and 17 kV, published Class-C telegraphy operation reaches approximately 100 kW output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	19 V / 138 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
AMPLIFICATION FACTOR	37
MAXIMUM PLATE VOLTAGE	17000 V
MAXIMUM PLATE DISSIPATION	40000 W
MAXIMUM CATHODE CURRENT	62 A
Published ratings/characteristics semantically audited; condition-specific operating values preserved in parameter rows.	

Federal F-895 high-power three-electrode transmitting tube for RF amplification, oscillator, and Class B modulator service. The water-cooled anode can dissipate 40 kW and the pure-tungsten filament is operated from three-phase AC.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 ITT

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1962 ITT

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	37	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	17000 V	—
Maximum plate dissipation	40000 W	—
Peak cathode current	9 A	—
Maximum/full-ratings frequency	25 MHz	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-plate capacitance	40 pF	—
Grid-filament capacitance	80 pF	—
Plate-filament capacitance	8 pF	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cooling method	Water	—

1962 ITT Industrial and Transmitting Tubes

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1962 ITT INDUSTRIAL AND TRANSMITTING TUBES

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	37	—
Peak cathode current	62 A	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament starting current	210 A	Maximum
Filament cold resistance	0.013 ohm	—
DC plate voltage	17000 V	ClassB Audio
Maximum signal DC plate current	9 A	ClassB Audio
Maximum signal plate input	100 kW	ClassB Audio
Plate dissipation	40 kW	ClassB Audio
DC plate voltage	17000 V	ClassC Telegraphy
DC grid voltage	-3000 V	ClassC Telegraphy
Plate input	140 kW	ClassC Telegraphy
Typical power output	100 kW	ClassC Telegraphy

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-plate capacitance	40 pF	—
Grid-filament capacitance	80 pF	—
Plate-filament capacitance	8 pF	—