



ELECTRONIC TUBE REFERENCE

6961

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

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Forced-air-cooled version of the 6960 industrial RF triode for induction and dielectric heating and plastic sealing. Approximately 6 kW plate dissipation and 10 kW Class C output provide substantial industrial RF power without water cooling.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	12.6 V / 33 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
AMPLIFICATION FACTOR	32
MAXIMUM PLATE VOLTAGE	7200 V
MAXIMUM PLATE DISSIPATION	6000 W
MAXIMUM GRID DISSIPATION	250 W
MAXIMUM CATHODE CURRENT	14 A
<i>Highest Class-C telegraphy/FM maximum ratings promoted.</i>	

Forced-air-cooled version of 6960 for industrial induction/dielectric heating and plastic sealing.



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	32	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum direct anode current	2.2 A	—
Maximum direct grid current	600 mA	—
Maximum negative grid bias magnitude	1250 V	—
Maximum operating frequency for full ratings	30 MHz	—
Typical output power maximum	10 kW	ClassC;Frequency=30MHz
Typical drive power maximum	460 W	—
Typical anode voltage maximum	6500 V	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Amperex Condensed

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

1963 AMPEREX CONDENSED

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	6000 W	—
Typical plate voltage	6500 V	RF industrial service
Typical plate current	2 A	RF industrial service
Typical power output	10000 W	RF industrial service
Typical grid voltage	-450 V	RF industrial service
Typical grid current	600 mA	RF industrial service
Grid full-input power	55 W	RF industrial service

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	11 pF	—
Grid-to-filament capacitance	16 pF	—
Plate-to-filament capacitance	0.3 pF	—