

Refer to type 6MF8.

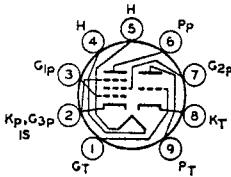
15MF8

Refer to chart at end of section.
For replacement use type 16A8/PCL82.

16A8

**16A8/
PCL82**
8B8

**HIGH-MU TRIODE—
POWER PENTODE**



9EX

Miniature type used in television receiver applications. The triode unit is used as a vertical oscillator or as an af amplifier, and the pentode unit is used as a vertical output tube or as an audio output tube. Outlines section, 6G; requires miniature 9-contact socket. Type 8B8 is identical with type 16A8/PCL82 except for heater ratings.

Heater Voltage	8B8	16A8/PCL82	
Heater Current	8	16	volts
Heater-Cathode Voltage	0.6	0.3	ampere
	±200	±200	volts

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

	Triode Unit	Pentode Unit	
Plate Supply Voltage	550	550	volts
Peak Plate Voltage*	600	2500	volts
Plate Voltage	250	250	volts
Peak Inverse Plate Voltage	—	500	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	550	volts
Grid-No.2 Voltage	—	250	volts
Cathode Current	15	50	mA
Plate Dissipation (Frame Output)	—	5	watts
Plate Dissipation (Audio Output)	—	7	watts
Grid-No.2 Input	—	1.8	watts
Peak Grid-No.2 Input	—	3.2	watts

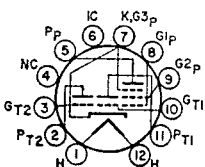
CHARACTERISTICS

	Triode Unit	Pentode Unit				
Plate Voltage	100	100	170	200	200	volts
Grid-No.2 Voltage	—	100	170	200	200	volts
Grid-No.1 Voltage	0	—6	—11.5	—12.5	—16	volts
Amplification Factor	70	—	—	—	—	
Mu Factor, Grid No.2 to Grid No.1	—	10	9.5	9.5	9.5	
Plate Resistance	—	15000	16000	20500	20000	ohms
Transconductance	2500	6800	7500	6800	6400	μmhos
Plate Current	3.5	26	41	35	7	mA
Grid-No.2 Current	—	5	8	6.5	35	mA

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:			
For fixed-bias operation	1	1	megohm
For cathode-bias operation	3	2	megohms

* With a maximum duty factor of 0.04 and maximum pulse duration of 0.8 milliseconds.



12GZ

**DUAL TRIODE—
BEAM POWER TUBE**

16AK9

Duodecax type used in vertical-deflection-amplifier, vertical oscillator and sync-clipper applications, in color television receivers. Outlines section, 15A; requires duodecax 12-contact socket. Heater: volts (ac/dc), 16.4; amperes, 0.6; average warm-up time, 11 seconds; maximum heater-cathode volts, ±200 peak, 100 average.