# High-Mu Triode

#### GLASS-METAL PENCIL TYPE

FAST WARM-UP TIME STURDY COAXIAL

STURDY COAXIAL ELECTRODE STRUCTURE

For Use in Cathode-Drive Service at Frequencies up to 3000 Mc

The 5876 is the same as the 5876A except for the following items:

CHARACTERISTICS RANGE VALUES	FUK EQ	UIPMENI	DESIGN	-
	Note	Min.	Max.	
Heater Current	1	0.125	0.145	amp
Heater-Cathode Leakage Current:				
Heater negative with				
respect to cathode	1,2	-	100	$\mu a$
Heater positive with				
respect to cathode	1,2	-	100	μa volts
Emission Voltage	6	-	14	volts
Plate Current (2)	1,11	-	100	$\mu a$

Note 1: With 6.3 volts ac or dc on heater.

Note 2: With 100 volts do between heater and cathode.

Note 6: With dc voltage on grid and plate which are connected together and adjusted to produce a cathode current of 30 ma. and have 5.5 volts on heater.

Note 11: With dc plate voltage of 250 volts and dc grid voltage of -15 volts.

### SPECIAL TESTS & PERFORMANCE DATA

## Intermittent Dynamic Life Performance:

This test (similar to MIL-E-ID, paragraph 4.11.3.2) is performed on a sample lot of tubes from each production run to insure high quality of rf performance. Each tube is lifetested in a cavity-type oscillator at 500  $\pm$  15 Mc under the following conditions: Heater voltage of 6.3 volts, platesupply voltage of 300 volts, cathode resistor is adjusted to give adc plate current of 25 ma. and value is recorded, platecircuit load resistance of zero ohms, heater positive with respect to cathode by 100 volts, and plate—seal temperature of 175° Cmin. Heater voltage is cycled at a rate of 110 minutes on and 10 minutes off.

For conditions with 6.3 volts acor dc on heater, dc plate volts = 200, grid resistor adjusted to give a dc plate current of I8milliamperes in acavity-type oscillator operating at I700  $\pm$  15 Mc.

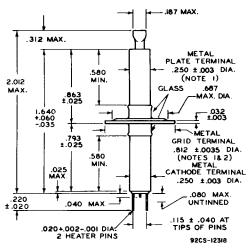
Shorts and Continuity Test specified in data for type 5876A.

- Indicates a change.



Except for the following, other tests shown under type  $5876\mathrm{A}$  are not performed on the 5876:

Low-Frequency Vibration Performance Shorts and Continuity Test Glass-Seal-Fracture Test



#### DIMENSIONS IN INCHES

NOTE 1: MAXIMUM ECCENTRICITY OF CENTER LINE (AXIS) OF PLATE TERMINAL OR GRID-TERMINAL FLANGE WITH RESPECT TO THE CENTER LINE (AXIS) OF THE CATHODE TERMINAL IS 0.008".

NOTE 2: TILT OF GRID-TERMINAL FLANGE WITH RESPECT TO ROTATIONAL AXIS OF CATHODE TERMINAL IS DETERMINED BY CHUCKING THE CATHODE TERMINAL, ROTATING THE TUBE, AND GAUGING THE TOTAL TRAVEL DISTANCE OF THE GRID-TERMINAL FLANGE PARALLEL TO THE AXIS AT A POINT APPROXIMATELY 0.020" INWARD FROM ITS EDGE FOR ONE COMPLETE ROTATION. THE TOTAL DISTANCE WILL NOT EXCEED 0.020".