5642

HALF-WAVE VACUUM RECTIFIER

SUBMINIATURE TYPE

For compact, portable high-voltage-rectifier applications

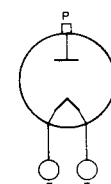
GENERAL DATA

Electrical:

Filament, Coated:		
Voltage	1.25	ac or dc volts
Current	0.2	amp
Direct Interelectrode Capacitance (Approx.):[o]		
Plate to filament	0.6	μμf

Mechanical:

Operating Position	Any
Maximum Length (Excluding flexible leads)	2.380"
Length, Base Seat to Bulb Top (Excluding tip)	1.700" ± 0.060"
Diameter	0.366" to 0.400"
Bulb	T3
Plate Terminal:	
Minimum length	0.250"
Leads, Flexible, Tinned	2
Minimum length	1.5"
Orientation and diameter	*See Dimensional Outline*
Maximum untinned distance from base seat	0.050"
Base	Special 2-Lead



P – Plate Terminal

F – Filament Lead

PULSED-RECTIFIER SERVICE

Maximum and Minimum Ratings, *Design-Center Values:*

For operation in a 525-line, 30-frame system[□]

PEAK INVERSE PLATE VOLTAGE	10000 max.	volts
PEAK PLATE CURRENT	5 max.	ma
DC PLATE CURRENT	0.25 max.	ma
FREQUENCY OF SUPPLY VOLTAGE	5 min.	kc

Typical Operation:

Peak-Pulse Plate Voltage[⊛]	8000	volts
DC Output Voltage (2 tubes)	12000	volts
DC Output Current	0.15	ma

Characteristics:

Plate Current for plate volts = 30	4	ma

o, □, ⊛: See next page.

ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

TENTATIVE DATA

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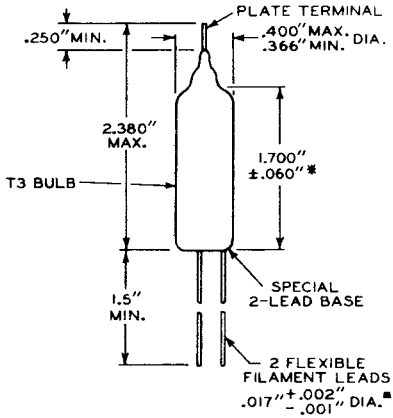
○ Without external shield.

□ As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

⊕ The duration of the voltage pulse must not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

OPERATING CONSIDERATIONS

The *flexible leads* of the 5642 are usually soldered to the circuit elements. Soldering of the connections should be made as far as possible from the glass button and the glass tip. If this precaution is not followed, the heat of the soldering operation will crack the glass seals of the leads and damage the tube.



* Measured from base seat to bulb-top line as determined by a ring gauge of 0.210" ± 0.001" inside diameter.

■ The specified lead diameter applies only in the zone between 0.050" and 0.250" from the base seat. Between 0.250" and 1.500", a maximum diameter of 0.021" is held. Outside of these zones, the lead diameter is not controlled.