

The 6927 is suitable for use as highfrequency amplifier, oscillator or mixer. With the grids in push-pull and the plates connected in parallel the tube may be used as a mixer at frequencies as high as 600 Mc/s. It is intended for use in equipments, requiring very long life with low probability of failure and is especially designed for dependable service under vibration conditions. When such a tube is desired as a replacement for the commercial type 6J6, the type 6927 is very suitable within its ratings.

When used under the conditions stated below the average life is warranted to be more than 10,000 hours.

Reference is made to "information about L M Ericsson longlife tubes".

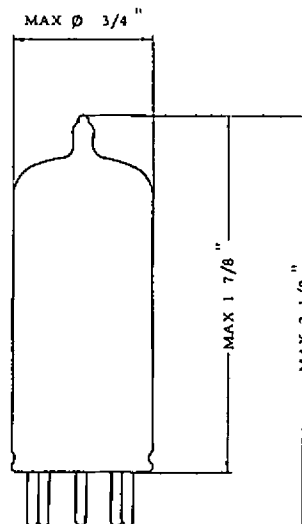
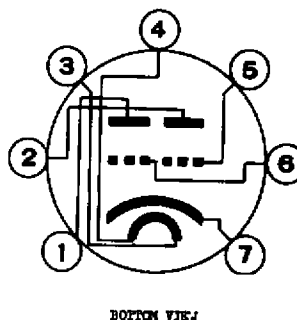
MECHANICAL DATA

Base: Small Button Miniature 7-pin, RETMA No. E7-1

Bulb: T 5 1/2

Mounting Position: Any

- | | |
|--------|--------------------|
| Pin No | Connected to |
| 1. | Plate of Section 2 |
| 2. | Plate of Section 1 |
| 3. | Heater |
| 4. | Heater |
| 5. | Grid of Section 1 |
| 6. | Grid of Section 2 |
| 7. | Cathode |



CAPACITANCES	WITH SHIELD*	WITHOUT SHIELD		
Grid to Plate, each Section	1.5	1.5		uuF
Input, each Section	2.6	2.0		uuF
Output, Section 1	1.6	0.45		uuF
Output, Section 2	1.0	0.40		uuF

RANGE VALUES FOR CAPACITANCES	MIN	AVE	MAX	
WITHOUT SHIELD				
Grid to Plate, each Section	1.2	1.5	1.8	uuF
Input, each Section	1.4	2.0	2.6	uuF
Output, Section 1	0.25	0.45	0.65	uuF
Output, Section 2	0.25	0.40	0.55	uuF

* Close-fitting external shield connected to pin No. 7.

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MAXIMUM RATINGS (EACH SECTION)

Plate Voltage	200	volts
Plate Current	15	milliamps
Plate Dissipation	1.3	watt
Heater - Cathode Voltage	90	volts
Bulb Temperature (at hottest point)	150	°C
Grid Circuit Resistance	0.5	megohm

TYPICAL OPERATION (EACH SECTION)

Heater Voltage **	6.3 ± 5%	6.3 ± 5%	volts
Heater Current	0.330	0.330	amp
Plate Supply Voltage	100	130	volts
Cathode Bias Resistor ^o	68	100	ohms
Plate Current	6.5	7.7	milliamps
Plate Resistance	7500	7200	ohms
Transconductance	5000	5300	umhos
Equivalent Noise Resistance	500	470	ohms

OPERATION RANGE VALUES (EACH SECTION)

Heater Voltage	6.3	volts		
Plate Supply Voltage	130	volts		
Cathode Bias Resistor ^o	100	ohms		
	MIN	AVE	MAX	
Heater Current	295	330	365	milliamps
Plate Current	4.7	7.7	10.7	milliamps
Transconductance	4200	5300	6400	umhos
Transconductance, End of Life Point ⁺	3600	-	-	umhos
Insulation Current, Heater to Cathode at $E_{hk} = \pm 100$ volts	-	-	20	uamps
Grid Current	-	-	- 0.5	uamp
Cutoff Plate Current at Grid Voltage = - 15 volts	-	-	0.2	milliamp
Vibration Output at 2.5 g and 25 c/s $R_p = 2,000$ ohms (both Sections)	-	10	-	millivolts

** As the life of the tube partly depends on the cathode temperature it is advised to keep the heater voltage within close limits. An Average Life of 10,000 hours is warranted provided that the heater voltage is kept within the given tolerance ± 5%.

^o Value is for both Sections operating as specified.

⁺ In view of warranty, the life of a tube corresponds to the time a tube has been operating until the transconductance has decreased to the End of Life Point. The average life for a group of tubes is defined as the total life of the group divided by the number of tubes in the group.