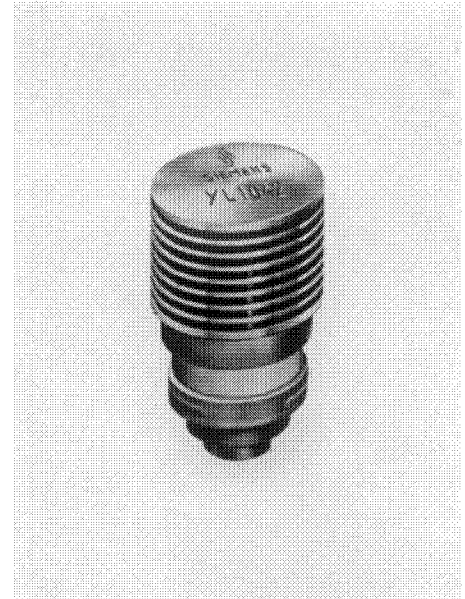
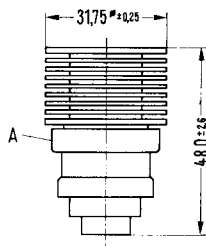


YL 1042

The YL 1042 is a very small forced-air-cooled metal-ceramic planax tetrode for frequencies up to 2 kMc, particularly suited for application in commercial radio communications SSB transmitters and TV-Transposers. Due to its stability under severe shock and vibration the tube is ideal for use in mobile equipment.



Weight approx. 60 g

General Data

HEATING

Heater Voltage 6.3 volts }
 Heater Current 1.1 amps } Matrix-Oxide-Cathode

Grid-Screen Amplification Factor 20 at DC Plate Voltage = 1000 volts
 DC Screen Voltage = 200 volts
 DC Plate Current = 100 ma

Transconductance 20,000 μ mhos at DC Plate current = 100 ma

INTERELECTRODE CAPACITANCES

measured with special socket

Grid-Cathode	9 μ F	Grid-Plate	0.03 μ F
Grid-Screen	15 μ F	Screen-Cathode	0.2 μ F
Screen-Plate	3.5 μ F	Plate-Cathode	0.01 μ F

Maximum Ratings

DC Plate Voltage ($f \leq 1250$ Mc)	max.	1000 volts
DC Screen Voltage	max.	300 volts
DC Grid Voltage	max.	-75 volts
DC Cathode Current	max.	180 ma
Plate Dissipation	max.	130 watts
Screen Dissipation	max.	2 watts
Grid Current	max.	16 ma
Grid Resistor	max.	30 kohms

Typical Operation

Linear RF Power Amplifier, SSB

	one tone	two tone	
Class	AB ¹⁾	AB ²⁾	
Frequency	60	900	Mc
Power Output	55	30 ³⁾	watts
DC Plate Voltage	1000	1000	volts
DC Screen Voltage	300	300	volts
DC Grid Voltage	-14	-8.5	volts
Peak RF Grid Voltage	14	7	volts
Zero Signal DC Plate Current	40	140	ma
DC Plate Current	120	150	ma
Plate Input	120	150	watts
Plate Dissipation	65	117	watts
3rd order Intermodulation Products		35 ⁴⁾	db
Gain		15	db

¹⁾ Grounded cathode

²⁾ Grounded grid

³⁾ Peak envelope power at 90 % circuit-efficiency

⁴⁾ at plate Load resistance of 3000 ohms

Other kind of operation:

TV-Transposer

Power Output (sync. Level) = 12 watts

at DC Plate Voltage = 900 volts

DC Screen Voltage = 300 volts

Zero-Signal

DC Plate Current = 100 ma

DC Plate Current = 120 ma

Characteristics

