

ELECTRONIC TUBE REFERENCE

GU5B

Power - Triode (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRIODE

Directly heated metal-ceramic power triode for RF amplification to approximately 110 MHz. It uses a carbonized thoriated-tungsten cathode and forced-air cooling, with roughly 25 kW plate dissipation for very-high-power transmitter service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	12.6 V / —	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
MAXIMUM PLATE VOLTAGE	5000 V
MAXIMUM PLATE DISSIPATION	25000 W
Promoted-field audit performed from English ratings/characteristics; detailed electrical values retained in parameter table. REDO promoted-field audit completed from English Limit Operating Values / Electrical Parameters tables.	

The GU-5B triode is used as a power-amplifier tube at frequencies up to 110 MHz in RF equipment. It has a directly heated carbonized thoriated-tungsten cathode and forced-air cooling.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 Electronintorg

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1968 ELECTRONINTORG

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
power amplifier tube at [1]	5 W	lenepaTopHbin Tpuog 'Y-5b npegHasHadeH ans The I'Y-5b triode is used as a power amplifier tube at
power amplifier tube at [2]	5 W	lenepaTopHbin Tpuog 'Y-5b npegHasHadeH ans The I'Y-5b triode is used as a power amplifier tube at
heating generators	1	TeXHU4ECKUX YCTPOWUCTBax 1 Ansa paboTbl B reHeparto- heating generators.
temperature, °C L ~ [1]	10 C	Temnepatypa okpyxatoien cpeael, °C Ambient temperature, °C L ~10to +55
temperature, °C L ~ [2]	55 C	Temnepatypa okpyxatoien cpeael, °C Ambient temperature, °C L ~10to +55
anode	3 uS	Mutual conductance (at anode voltage 3 kV, anode
voltages	2 V	Gain coefficient (at anode voltages 2 and
current0 [1]	4 A	4kV and anode current0.5A) 60-85
current0 [2]	5 A	4kV and anode current0.5A) 60-85
current0 [3]	60 A	4kV and anode current0.5A) 60-85
current0 [4]	-85 A	4kV and anode current0.5A) 60-85
voltage [1]	4 kV	anode voltage 4 kV), A L 0.45-0.75
voltage [2]	0.45 kV	anode voltage 4 kV), A L 0.45-0.75
voltage [3]	-0.75 kV	anode voltage 4 kV), A L 0.45-0.75
input,atmost	19	input,atmost 19

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
output,atmost [1]	0.5	output,atmost ... 0.5 1.3 - kavop:
output,atmost [2]	1.3	output,atmost ... 0.5 1.3 - kavop:
wavelength	12 cm	Output power (at wavelength 12 cm), kW, at C-cetka
anode	35	least e 35 C - grid; A—anode:
cathode	2	cathode; 2 - cathode
dissipation, kW oL [1]	25 kW	Paccensaemas mowHOCTb aHogom, KBT 25 Anode dissipation, kW oL 25
dissipation, kW oL [2]	25 kW	Paccensaemas mowHOCTb aHogom, KBT 25 Anode dissipation, kW oL 25
frequency, MHz [1]	110 MHz	Pabowaswactota, My, 110 Operating frequency, MHz 110
frequency, MHz [2]	110 MHz	Pabowaswactota, My, 110 Operating frequency, MHz 110
Temperature at envelope, stem and seals, °C [1]	60104 C	TemnepaTypa 060104KN, HOXKU 1 Temperature at envelope, stem and seals, °C 150
Temperature at envelope, stem and seals, °C [2]	1 C	TemnepaTypa 060104KN, HOXKU 1 Temperature at envelope, stem and seals, °C 150
Temperature at envelope, stem and seals, °C [3]	150 C	TemnepaTypa 060104KN, HOXKU 1 Temperature at envelope, stem and seals, °C 150
Filament Characteristic Curve U =	126	Averaged Filament Characteristic Curve U =126V
Cathode R	0.06 ohm	Resistance of Fil y Cathode R.: 0.06 ()

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

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