

from JEDEC release #3965, Nov. 5, 1962

JEDEC release #3965A (Jan. 28, 1963) states:

Delete data and substitute statement:
Type 6100 is the same as type 6C4.

TYPE: 6100

SPONSOR: JT-5 COMMITTEE

(JEDEC Committee on
Low-Power Vacuum Tubes)

TRIODE

Mechanical Data

Coated unipotential cathode

Outline drawing.	5-2	Bulb	T 5 1/2
Base		E7-1 Miniature button	7-pin
Maximum diameter			3/4"
Maximum overall length			2 1/8"
Maximum seated height.			1 7/8"
Pin connections.			Basing 6BG
Pin 1 - Plate		Pin 5 - Plate	
Pin 2 - Internal connection		Pin 6 - Grid	
Pin 3 - Heater		Pin 7 - Cathode	
Pin 4 - Heater			
Mounting position.			Any

Electrical Data

<u>Direct interelectrode capacitances</u>	<u>With Shield *</u>	<u>Without Shield</u>	
Grid to plate: (g to p)	1.4	1.6	μf
Input: g to (h + k)	1.8	1.8	μf
Output: p to (h + k).	2.5	1.3	μf

* External shield No. 316 connected to pin No. 7.

Ratings

	<u>Class A₁ Amplifier</u>	<u>Class C Telegraphy</u>	
Heater voltage (ac or dc).	6.3	6.3	volts
Maximum heater-cathode voltage			
Heater negative with respect to cathode:			
Total DC and peak.	200	200	volts
Heater positive with respect to cathode:			
DC	100	100	
DC and peak.	200	200	
Maximum plate voltage.	300	300	volts
Maximum negative dc grid voltage . . .	---	-50	volts
Maximum grid circuit resistance (fixed bias)	0.25	0.25	megohm
Maximum plate dissipation.	3.5	5	watts
Maximum dc plate current	---	25	ma
Maximum dc grid current.	---	8	ma

Typical operating conditions and characteristics, Class A₁ amplifier

Heater voltage	6.3	6.3	volts
Heater current	150	150	ma
Plate voltage.	100	250	volts
Grid voltage §	0	-8.5	volts
Amplification factor	19.5	17	

§ Transformer or impedance-type input coupling devices are recommended to minimize resistance in the grid circuit.

Typical operating conditions and characteristics, Class A1 amplifier (Continued)

Plate resistance	6250	7700	ohms
Transconductance	3100	2200	μmhos
Plate current.	11.8	10.5	ma
Grid voltage (approx.) for Ib = 10 μa.	-10	-25	volts

Typical operating conditions and characteristics, Class C Telegraphy §§

Heater voltage	6.3	volts
Heater current	150	ma
Plate voltage.	300	volts
Grid voltage	-27	volts
Plate current.	25	ma
Grid current (approx.)	7	ma
Grid driving power (approx.)	0.35	watts
Power output (approx.)	5.5	watts

§§ Approximately 2.5 watts output can be obtained when the 6100 is used at 150 megacycles as an oscillator with a grid resistor of 10,000 ohms and with maximum rated input.

Refer to "Interpretation of Receiving Tube Ratings"