6664/6AB4

High-Mu Triode

7-PIN MINIATURE TYPE

For Mobile-Communications Equipment

GENERAL DATA

Electrical:

Heater Characteristics and Ratings *(Absolute-Maximum Values)*:			
Voltage (AC or DC)	6.3[a]		volts
Current at heater volts = 6.3	0.150		amp
Peak heater-cathode voltage:			
Heater negative with respect to cathode	100	max.	volts
Heater positive with respect to cathode	100	max.	volts

Direct Interelectrode Capacitances (Approx.):

	Without External Shield	*With External Shield*[b]	
Grid to plate	1.5	1.5	μμf
Grid to cathode and heater	2.2	2.2	μμf
Plate to cathode and heater	0.5	1.4	μμf
Cathode to plate	0.24	0.20[c]	μμf
Cathode to grid and heater	5.0	5.2[d]	μμf
Plate to grid and heater	1.7	2.6[d]	μμf
Heater to cathode	2.9	2.9[c]	μμf

Characteristics, Class A_1 Amplifier:

Plate Supply Voltage	100	250	volts
Cathode Resistor	270	200	ohms
Amplification Factor	60	60	
Plate Resistance (Approx.)	15000	10900	ohms
Transconductance	4000	5500	μmhos
Plate Current	3.7	10	ma
Grid Voltage (Approx.) for plate μa = 10	-5	-12	volts

Mechanical:

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	2-1/8"
Maximum Seated Length	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip)	1-1/2" ± 3/32"
Diameter	0.650" to 0.750"
Dimensional Outline	See *General Section*
Bulb	T5-1/2
Base	Small-Button Miniature 7-Pin (JEDEC No.E7-1)

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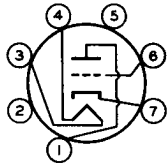
Basing Designation for BOTTOM VIEW. 5CE

Pin 1 – Plate
Pin 2 – No Internal Connection
Pin 3 – Heater
Pin 4 – Heater



Pin 5 – No Internal Connection
Pin 6 – Grid
Pin 7 – Cathode

AMPLIFIER — Class A[1]

Maximum Ratings, *Absolute-Maximum Values:*

PLATE VOLTAGE.	330 max.	volts
GRID VOLTAGE:		
Negative-bias value.	55 max.	volts
Positive-bias value.	0 max.	volts
PLATE DISSIPATION.	2.9 max.	watts

[a] When operated from storage-battery systems, the heater may be subjected to voltage variations as great as ± 20 per cent. Although such extremes in heater voltage may be tolerated for short periods, increased equipment reliability can be achieved with improved supply-voltage regulation.

[b] With external shield JEDEC No.316 connected to cathode except as noted.

[c] With external shield JEDEC No.316 connected to ground.

[d] With external shield JEDEC No.316 connected to grid.

SPECIAL RATINGS & PERFORMANCE DATA

Heater-Cycling:

Cycles of Intermittent Operation . . . . . 2000 min. cycles

This test is performed on a sample lot of tubes from each production run under the following conditions: heater volts = 7.5 cycled one minute on and one minute off, heater 135 volts positive with respect to cathode, and all other elements connected to ground. At the end of this test, tubes are checked for heater-cathode shorts and open circuits.

Transconductance at Reduced Heater Voltage:

Average Value. . . . . 3200 μmhos

With heater volts = 5.0, plate supply volts = 250, and cathode resistor (ohms) bypassed = 200.