

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.):

	<i>Without External Shield</i>	<i>With External Shield^b</i>	
Grid to plate	1.5	1.5	$\mu\mu\text{f}$
Grid to cathode and heater. . . .	2.2	2.2	$\mu\mu\text{f}$
Plate to cathode and heater . . .	0.5	1.4	$\mu\mu\text{f}$
Cathode to plate.	0.24	0.20 ^c	$\mu\mu\text{f}$
Cathode to grid and heater. . . .	5.0	5.2 ^d	$\mu\mu\text{f}$
Plate to grid and heater.	1.7	2.6 ^d	$\mu\mu\text{f}$
Heater to cathode	2.9	2.9 ^c	$\mu\mu\text{f}$

Characteristics, Class A₁ 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 $\mu\text{a} = 10$	-5	-12	volts

Mechanical:

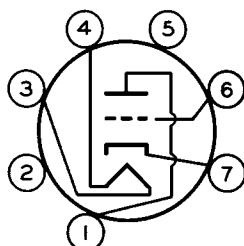
Operating Position.	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length.	2-1/8"
Maximum Seated Length	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip). . .	1-1/2" $\pm$ 3/32"
Diameter.	0.650" to 0.750"
Dimensional Outline	See <i>General Section</i>
Bulb.	T5-1/2
Base.	Small-Button Miniature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



6664/6AB4

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 A₁

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

