



RF AMPLIFIER TETRODE

6CY5
CATV

6CY5/CATV is an especially developed longlife version of 6CY5. It is a sharp-cutoff tetrode of 7-pin miniature type, intended for reliable service within the wide range of amplifiers and other equipment used for CATV purposes.

COLD CAPACITANCES (external shield connected to cathode)

Grid No 1 to Plate	0.03	$\mu\mu\text{F}$
Input	4.5	$\mu\mu\text{F}$
Output	3.0	$\mu\mu\text{F}$

ABSOLUTE MAXIMUM RATINGS

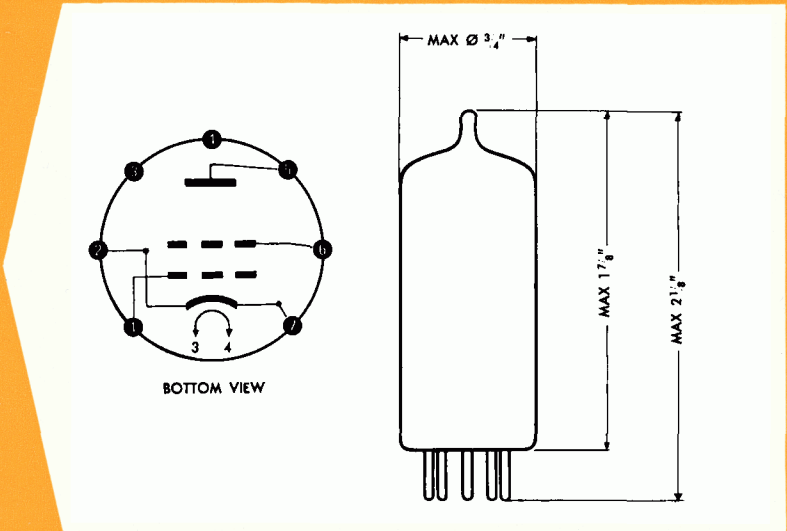
Plate Voltage	200	volts
Grid No 2 Voltage	200	volts
Grid No 1 Voltage, Positive Value	5	volts
Grid No 1 Voltage, Negative Value	50	volts
Plate Dissipation	2.2	watts
Grid No 2 Dissipation (see Section A)	0.55	watt
Cathode Current	22	ma
Heater-Cathode Voltage	100	volts
Grid No 1 Circuit Resistance	0.5	megohm

MECHANICAL DATA

Base: Small Button Miniature 7-pin,
RETMA E7-1
Bulb: EIA T 5½
Mounting Position: Any

PIN NO. CONNECTED TO

- 1. Grid No 1
- 2. Cathode, Int. Shield
- 3. Heater
- 4. Heater
- 5. Plate
- 6. Grid No 2
- 7. Cathode, Int. Shield



6CY5

CATV

RF AMPLIFIER TETRODE



TYPICAL OPERATION

Heater Voltage**	6.3	volts
Heater Current	200	ma
Plate Voltage	125	volts
Grid No 2 Voltage	80	volts
Grid No 1 Voltage	— 1	volt
Plate Current	10	ma
Grid No 2 Current	1.5	ma
Transconductance	8000	μ mhos
Plate Resistance	0.1	Mohm
Grid No 1 Voltage for $I_b = 20 \mu A$	— 6	volts

OPERATION RANGE VALUES

Heater Voltage		6.3		volts
Plate Supply Voltage		125		volts
Grid No 2 Supply Voltage		80		volts
Grid No 1 Voltage*		— 1		volts
	MIN	AVE	MAX	
Heater Current	185	200	215	ma
Plate Current	6.5	10.0	16.0	ma
Grid No 2 Current		1.5	2.5	ma
Transconductance	6300	8000	10200	μ mhos
Transconductance, End of Life Point	5200			μ mhos
I_{hk} at $E_{hk} = \pm 100$ volts			20	μa
Grid No 1 Current			— .5	μa
Measured at $E_b = 125$ V				
$E_{c2} = 125$ V $E_{c1} = -1,5$ V				
$R_{g1} = 0,5$ Mohms				
Cutoff Plate Current at $E_{c1} = -6$ volts			200	μa