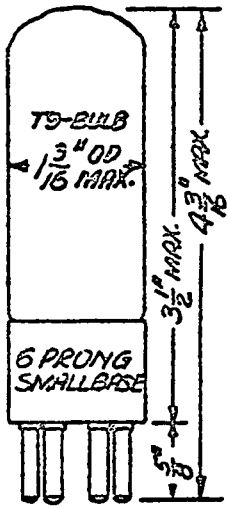
6U5-6G5

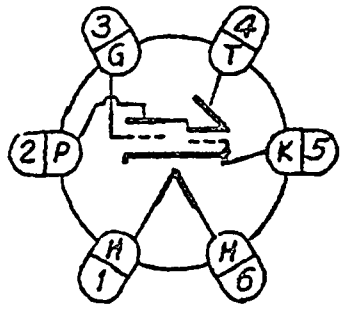
RAYTHEON

6U5-6G5

CATHODE RAY TUNING INDICATOR
Heater Type Glass Bulb



The 6U5/6G5 is a high vacuum type indicator tube with remote cutoff characteristics designed for service as a tuning indicator in radio receivers. The 6U5/6G5 may be used also to replace types 6H5 and 6T5.



BOTTOM VIEW OF SOCKET

RATINGS

Heater Voltage (a-c or d-c)	6.3	volts
Heater Current	0.3	amp
Maximum Plate Supply Voltage	250	volts
Maximum Target Voltage	250	volts
Minimum Target Voltage	90	volts

TUNING INDICATOR

Plate Supply Voltage	100	200	250	volts
Target Voltage	100	200	250	volts
Plate Resistor	0.5	1	1	megohm
Target Current *	1	3	4	ma
Plate Current (zero Bias)	0.19	0.19	0.24	ma
Grid Bias (approximate) (For Shadow angle = 0°)	-8	-18.5	-22	volts
Grid Bias (approximate) (For Shadow angle = 90°)	0	0	0	volts

The 6U5/6G5 is a high vacuum tube designed to indicate visually the effect of changing the control grid bias. The shaded pattern produced on the fluorescent target varies through an angle from 90° to approximately 0° as the control voltage is varied. The voltage on the shadow control electrode, the extension of the triode plate between the cathode and target, controls the extent of the shaded area. The voltage of the shadow control electrode is determined by the voltage of the control grid of the triode connected as a d-c amplifier. Thus the control grid voltage determines the extent of the shadow. An increase of control grid bias thus increases the shadow control voltage and decreases the shadow while a decrease of bias increases the shadow. In practical use the control grid voltage is obtained from a suitable point in the AVC network.

* Subject to wide variations.

from RMA release #146, Nov. 1, 1938

Revised October 6, 1938

JETEC DATA
JOINT ELECTRON TUBE ENGINEERING COUNCIL
COMMITTEE ON RECEIVING TUBES

JETEC TYPE 6U5/6G5

TUNING INDICATOR

MECHANICAL DATA

Coated unipotential cathode

Outline drawing	9-26
Bulb	T-9
Base	A6-7 small 6-pin
Maximum diameter	1-3/16"
Maximum overall length	4-3/16"
Maximum seated height	3-9/16"
Pin connections	Basing 6R-0-0

Pin 1 - Heater
Pin 2 - Plate
Pin 3 - Triode grid
Pin 4 - Target
Pin 5 - Cathode and target grid
Pin 6 - Heater

Mounting position . . . . . any

ELECTRICAL DATA

Ratings

Heater voltage (ac or dc)	6.3	volts
Heater current	0.300	ampere
Maximum plate-supply voltage	285	volts
Maximum target voltage	285	volts
Minimum target voltage	125	volts
Maximum plate dissipation	1.0	watt

Typical Operating Conditions and Characteristics

Heater voltage	6.3	6.3	volts
Plate and target supply	200	250	volts
Series triode-plate resistor	1	1	megohm
Target current* (subject to wide variations)	3	4	ma
Triode-plate current*	0.19	0.24	ma
Grid bias (approx.) for shadow angle = 0°	-18.5	-22	volts
Grid bias (approx.) for shadow angle = 90°	0	0	volts

*Measured at zero grid bias

The 6U5/6G5 will supersede the 6G5 and 6U5. It can also be used to replace types 6H5 and 6T5.

Refer to "Interpretation of Receiving Tube Ratings"