

WESTERN ELECTRIC 6028 *ELECTRON TUBE

TYPE DESIGNATION REGISTRATION

DESCRIPTION

The 6028* is miniature type pentode having an indirectly heated cathode. It is designed for use in amplifier circuits at high and ultra high frequencies.

MECHANICAL DATA

Cathode	Coated Unipotential
Outline	5-1
Bulb	T 5-1/2
Base	E7-1 miniature button 7-pin
Mounting positions	Any
Maximum bulb diameter	3/4 inch
Maximum overall length	1-3/4 inch
Maximum seated height	1-1/2 inch
Pin connections	Basing No. 7BD
Pin #1 Grid #1	Pin #5 Plate
Pin #2 Cathode, grid #3 & internal shield	Pin #6 Grid #2
Pins #3 & #4 Heater	Pin #7 Cathode, Grid #3 & internal shield

ELECTRICAL DATA

Heater voltage	20 volts	
Heater current	50 milliamperes	
Direct interelectrode capacitances	without external shield	with external shield #316(a)
Grid to plate (g1 to p) maximum	.03	.02 uuf
Input: g1 to (h+k+g2+g3+i.s.)	4.0	4.0 uuf
Output: p to (h+k+g2+g3+i.s.)	2.1	2.8 uuf

(a) External shield #316 connected to pins #2 and #7

MAXIMUM RATINGS, DESIGN CENTER VALUES

Plate voltage	180 volts
Grid #2 voltage	See J5-C4
Grid #2 supply voltage	180 volts
Positive d-c grid #1 voltage	0 volts
Heater cathode voltage	75 volts
Cathode current	18 milliamperes
Plate dissipation	1.7 watts
Grid #2 dissipation	0.5 watt

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TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS, CLASS A1 AMPLIFIER

Plate voltage	120 volts
Grid #2 voltage	120 volts
Grid bias resistor	180 ohms
Plate resistance (approx.)	0.30 megohm
Transconductance	5000 umhos
Plate current	7.5 milliamperes
Grid #2 current	2.5 milliamperes
Grid #1 voltage for $I_b = 10 \text{ ua}$	-8.5 volts

*6028/408A

May 21, 1951

