

NEW NATIONAL UNION ELECTRON TUBEN.U. 3C27B DATA

MICRO-WAVE COAXIAL TRIODE

from RMA release # 605, Sept. 12, 1947

The National Union 3C27B is a coaxial triode designed especially for micro-wave pulsed oscillator service. Conservatively rated, one tube employed in suitable resonant cavity circuits will deliver 10 kw. peak radio frequency power at 1150 megacycles.

MAXIMUM RATINGS:-

Heater Voltage	6.3 ± 5%	Volts max.
Grid Voltage	-1000	Volts max.
Anode Voltage (Instantaneous)	5000	Volts max.
Anode Dissipation	150	Watts max.
Grid Dissipation		
Operating Temperature		
Anode and Grid Seals	140°	C max.
Cathode Seal	180°	C max.

ELECTRICAL RATINGS:-

Cathode: Oxide Coated Unipotential		
Voltage	6.3	Volts
Current	2.5	Amps.
Amplification Factor	23	
Transconductance (Eb = 700v, Ip = 70 ma)	7500	umhos

DIRECT INTERELECTRODE CAPACITANCES:-

Grid to Plate	3.5	uuf
Grid to Cathode	4.0	uuf
Cathode to Plate	1.45	uuf

MECHANICAL RATINGS:- (See Reverse)

MAXIMUM OVERALL DIMENSIONS

Length	3 17/64 inches
Diameter	1 1/2 inches
Mounting Position	Any
Radiators - Integral - See outline drawing	
Type of Cooling	Air Blast

TYPICAL OPERATING CONDITIONS:-

Class C Oscillator, Plate Pulsed

Frequency	1140 megacycles
Anode Voltage (Instantaneous)	5000 Volts
Duty Cycle	.005 %
Peak Power Output	8 Kw.

Cooling by Air Blast (Volumes)

Plate Radiator	4 cu. ft/min.
Grid Radiator	1 cu. ft/min.

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See Over

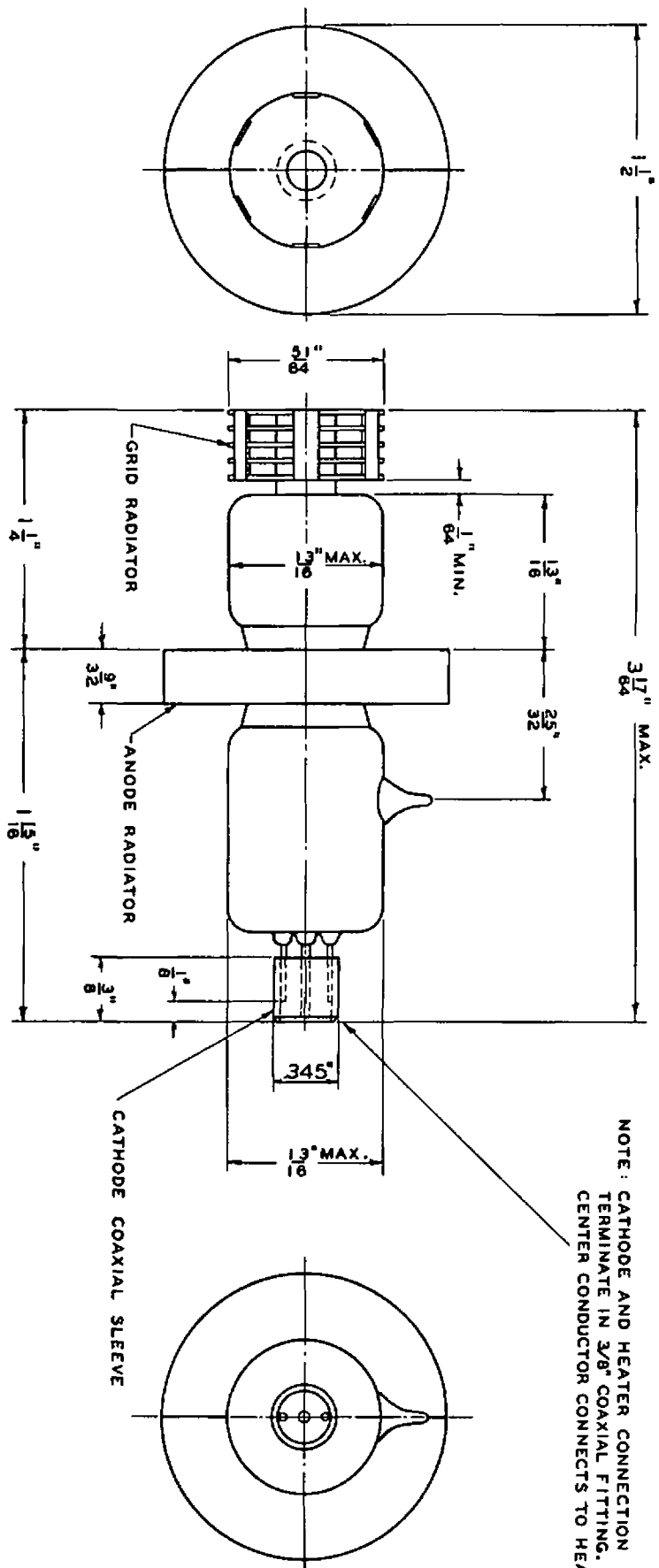
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NEW JERSEY



**NOTE: CATHODE AND HEATER CONNECTION
TERMINATE IN 3/8" COAXIAL FITTING.
CENTER CONDUCTOR CONNECTS TO HEATER.**