from JETEC release #1431, Aug. 16, 1954

Description and Rating

MAGNETRON GL-6527

9345 - 9405 MEGACYCLES	INTEGRAL MAGNET
9 KILOWATTS PEAK OUTPUT	FORCED-AIR-COOLED
PULSED	HIGH-ALTITUDE OPERATION

The GL-6527 is a forced-air-cooled fixed-frequency pulsed-type oscillator tube. A particular feature of this tube is its ability to operate reliably at altitudes as high as 60,000 feet.

TECHNICAL INFORMATION

GENERAL

Electrical

Cathode - Coated Unipotential

Heater Voltage - Pre-Heat	6.3 ± 10%	Volts
Heater Current at 6.3 Volts - Pre-Heat	500	Milliamperes
Heating Time - Pre-Heat, minimum	2	Minutes

Mechanical

Mounting Position - Any
Mounting Support - UG-40/U Choke Flange

Output Coupling - UG-40/U Flange
Load Transmission Line - RG-52/U Waveguide

Anode Temperature, Maximum [redacted]	200	C
Cathode Stem Temperature, Maximum [redacted]	200	C
Net Weight, approximate	3	Pounds

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

Maximum Ratings, Absolute Values

Duty Cycle	0.0025	
Heater Voltage	7.0 Max	Volts
Heater Current	0.60 Max	Amperes
Peak Anode Voltage	6000 Max	Volts
Peak Anode Current	5.5 Max	Amperes
Average Power Input	82.5 Max	Watts
Pulse Duration	2.5 Max	Microseconds
Rate of Rise of Anode Voltage	60 Max	Kilovolts per Microsecond

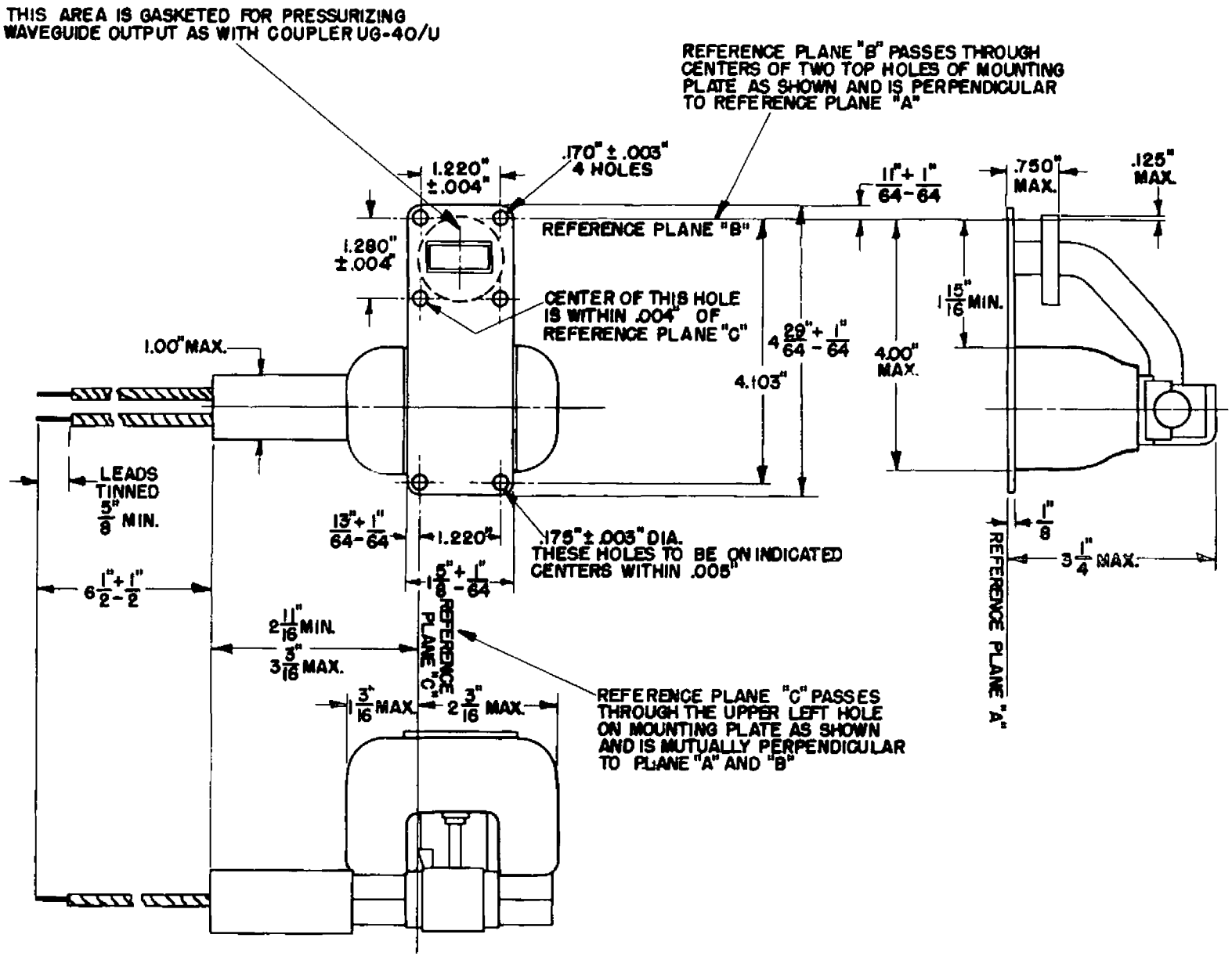
Maximum Ratings, Absolute Values (Cont'd)

Output Circuit Pressurization			45 Max	Pounds per Square Inch Absolute
Maximum Altitude without Pressurization				
Output Circuit			60,000	Feet
Input Terminals			60,000	Feet
Load Voltage Standing Wave Ratio			1.5	

Typical Operation

Peak Anode Voltage			5.5 ± 0.2	Kilovolts
Pulling Factor, VSWR 1.5/1			12	Megacycles
Frequency			9375 ± 30	Megacycles
Duty Cycle	0.002	0.0008	0.00064	
Heater Voltage	4.5	6.3	6.3	Volts
Heater Current	-	0.5	0.5	Amperes
Peak Anode Voltage	5500	5500	5500	Volts
Current Pulse Width	1.0 ± 10%	2.2 ± 10%	0.8 ± 10%	Microseconds
Voltage Pulse, Rate of Rise	55 ± 5	55 ± 5	55 ± 5	Kilovolts per Microsecond
Peak Power Output	9000	9000	9000	Watts

GENERAL ELECTRIC COMPANY
TUBE DEPARTMENT
SCHENECTADY 5, NEW YORK


THIS AREA IS GASKETED FOR PRESSURIZING WAVEGUIDE OUTPUT AS WITH COUPLER UG-40/U
REFERENCE PLANE "B" PASSES THROUGH CENTERS OF TWO TOP HOLES OF MOUNTING PLATE AS SHOWN AND IS PERPENDICULAR TO REFERENCE PLANE "A"
1.220" ±.004"
.170" ± .003" 4 HOLES
11"/64 + 1"/64
.750" MAX.
.125" MAX.
REFERENCE PLANE "B"
1.280" ±.004"
CENTER OF THIS HOLE IS WITHIN .004" OF REFERENCE PLANE "C"
1.00" MAX.
4 29"/64 + 1"/64
4.103"
4.00" MAX.
1 15"/16 MIN.
LEADS TINNED 5"/8 MIN.
13"/64 + 1"/64
1.220"
.175" ± .003" DIA. THESE HOLES TO BE ON INDICATED CENTERS WITHIN .005"
1"/8
3 1"/4 MAX.
6 1"/2 - 2"
5"/8 + 1"/64
2 11"/16 MIN.
3"/16 MAX.
REFERENCE PLANE "C"
REFERENCE PLANE "A"
1 3"/16 MAX.
2 3"/16 MAX.
REFERENCE PLANE "C" PASSES THROUGH THE UPPER LEFT HOLE ON MOUNTING PLATE AS SHOWN AND IS MUTUALLY PERPENDICULAR TO PLANE "A" AND "B"