

TENTATIVE DATA

Type 6133

RAYTHEON

Type 6133

GENERAL CHARACTERISTICS

Microwave oscillator employing a demountable tuning cavity. Oxide coated unipotential cathode. Frequency range from 1200 to 3750 megacycles.

Heater Voltage (AC or DC) 6.3 Volts
 Heater Current 650 mA

MAXIMUM RATINGS

Grid #1 300 Volts dc
 Grid #2 300 Volts dc
 Grid #3 300 Volts dc
 Cathode Current 45 mA dc
 Reflector Voltage 0 to -300 V dc
 Frequency Range with Suitable Cavity 1200 to 3750 mc
 Heater Cathode Potential Difference 45 V dc

TYPICAL OPERATION

Grid #1 300 Volts dc
 Grid #2 300 Volts dc
 Grid #3 300 Volts dc
 Cathode Current 40 mA dc max
 Reflector Voltage -182 to -227 dc
 Frequency Range 3458 to 3592 mc
 Power Output 95 mW Minimum
 140 mW Average

Electronic Tuning Range (Between $\frac{1}{2}$ Power Points from 3458 to 3592 mc) . . 20ms
 Maximum Frequency Change in any 20°C Range from 20°C to 85°C using Navy Brass Cavity. (Raytheon Drawing C-16028 - S25). 3ms

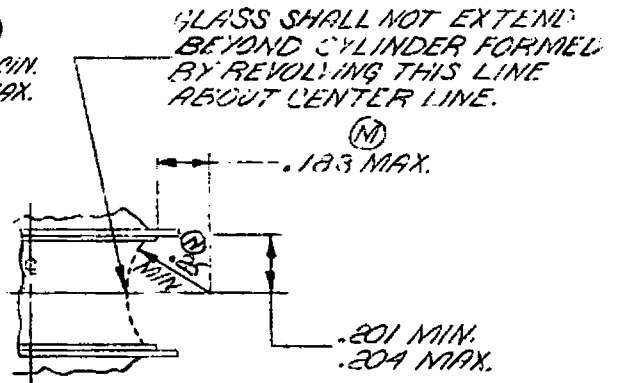
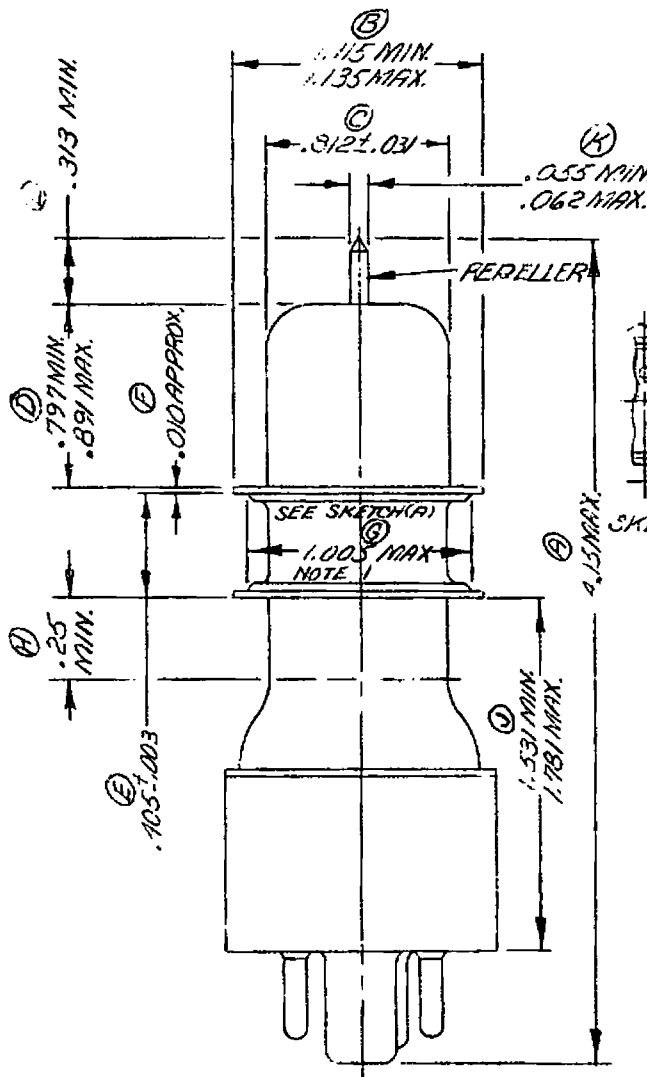
MECHANICAL

Base Standard Intermediate Octal

Pin #:	2	7	3	6	Top Cap
Element	Heater	Heater	Cathode	Grid #1	Reflector

Maximum over-all dimensions: Height . . . 4.150" Diameter . . . 1 $\frac{9}{32}$ "
 Mounting Any Position
 Cooling Freely Circulating Air

JAN-TYPE 6133



SKETCH A

NOTE 1:
DIMENSION APPLIES TO EACH DISC SEPARATELY.

NOTE 2:
DISCS SHALL BE CONCENTRIC WITH EACH OTHER WITHIN 0.015". THE DISCS SHALL BE CONCENTRIC WITHIN .099".

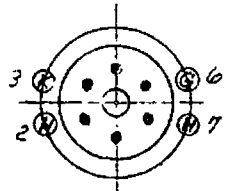
NOTE 3:
DISCS SHALL BE SMOOTH, FREE FROM TEARS AND SHALL BE GOLD PLATED 20MMSI OR 10MMSI NICKEL PLUS 10MMSI SILVER.

NOTE 4:
THE CAVITY DIMENSIONS WHICH CORRESPOND TO THE 0.405 ± 0.003 DIMENSIONS ON THE TUBES SHALL BE 0.401" MAX., 0.396" MIN.

ALL DIMENSIONS IN INCHES.

DESIGN TEST: A, C, D, H, J,
TYPE APPROVAL TEST: F, K, L,
NOTE 3.

PRODUCTION TEST: B, E, G, M, N,
NOTES 1 & 2.



BOTTOM VIEW OF
STANDARD INTERMEDIATE
OCTAL BASE

6133

6 SEPT. 1951