

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

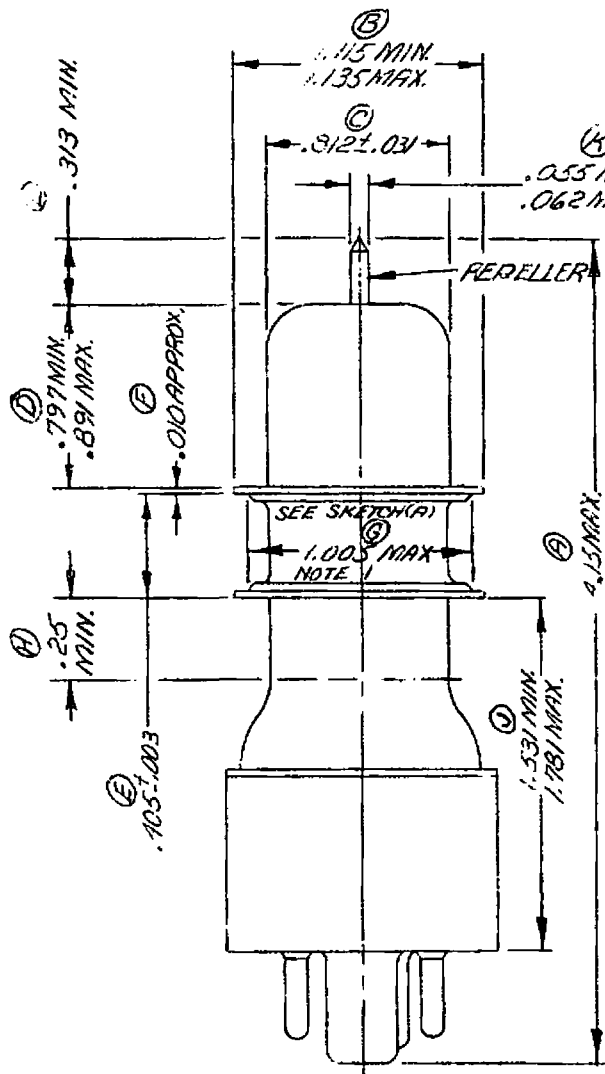
Grid #1 300 Volts dc
Grid #2 300 Volts dc
Grid #3 300 Volts dc
Cathode Current 40 mA dc max
Reflector Voltage -182 to -227 dc
Frequency Range 3458 to 3592 mc
Power Output 95 mW Minimum
140 mW Average

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

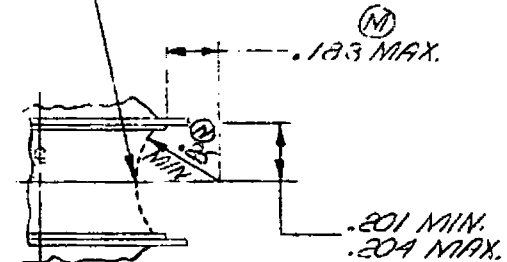
MECHANICAL

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 9/32"
Mounting Any Position
Cooling Freely Circulating Air

JAN-TYPE 6133



GLASS SHALL NOT EXTEND BEYOND CYLINDER FORMED BY REVOLVING THIS LINE ABOUT CENTER LINE.



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".

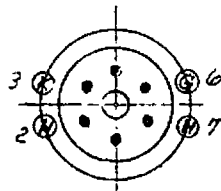
NOTE 3:
DISCS SHALL BE SMOOTH, FREE FROM TEARS AND SHALL BE GOLD PLATED 20MSI OR 10MSI NICKEL PLUS 10MSI SILVER.

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