



## MECHANICAL DATA

Mounting Position: . . . . . Any  
Between rf choke flanges in 0.360 x 0.220  
O.D. 0.040 WT waveguide.  
Ambient Temperature Range: . . . . . -40 to +100° C  
(non-operating)  
Frequency Change: . . . . .  $\Delta f_o = \pm 50$  Mc Max.  
with Temperature (0 to 100°C at 34,860 Mc)  
Dimensions: . . . . . See Outline

## ELECTRICAL DATA

## IGNITOR CHARACTERISTICS

Ignitor Open Circuit Voltage . . . . . -750 to -1000 Vdc  
Ignitor Current . . . . . 200  $\mu$  Adc Max.  
Ignitor Voltage Drop at 100  $\mu$ a . . . . . 200 to 350 Vdc

## LOW POWER LEVEL UNFIRED CHARACTERISTICS

Insertion Loss . . . . . 2.0 db Max.  
Ignitor Interaction at 100  $\mu$ a . . . . . 0.2 db Max.

## HIGH POWER LEVEL FIRED CHARACTERISTICS

Leakage Power<sup>1</sup> . . . . . 30 Mw Max.  
Recovery Time<sup>1</sup> . . . . . 4  $\mu$ s Max.  
at -3 db

## NOTE:

1.  $p_o = 8$  kw;  $f = 34,860$  mc;  $I_z = 100$   $\mu$ Adc;  
 $p_{rr} = 2000$  pps;  $t_p = 0.25$   $\mu$ s or  
 $p_{rr} = 1000$  pps;  $t_p = 0.5$   $\mu$ s

## APPLICATION DATA

Sylvania Type 5790 is a High-Q, tunable transmit-receiver tube used in high definition radar where fine resolution is the prime requisite. The specific function of this tube is to isolate the sensitive receiver from the magnetron during the transmitted pulse. The TR tube recovers within 4 microseconds using a -3 db reference level, affording minimum loss of received signal. The 5790 has an integral cavity and operates over the range between 33,815 mc and 35,905 mc.

## QUICK REFERENCE DATA

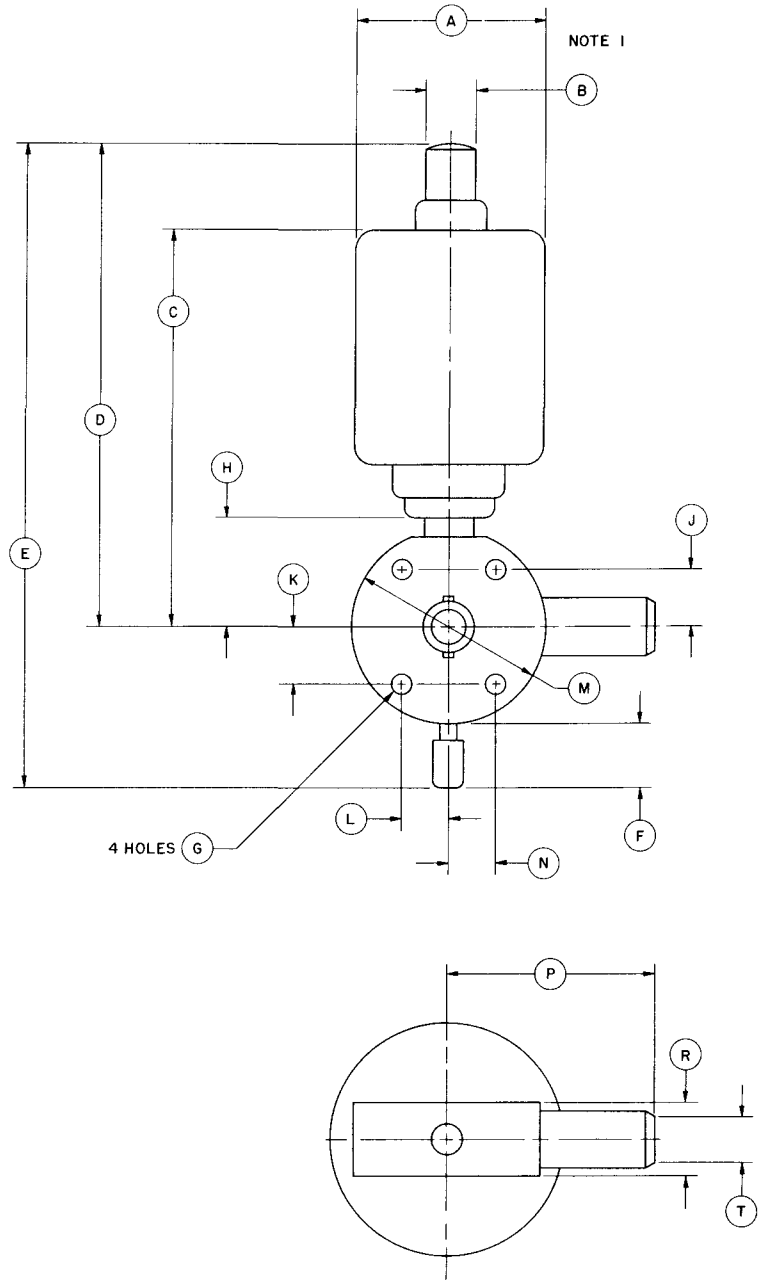
The Sylvania Type 5790 is an integral cavity tunable tube designed to operate between 33,815 mc and 35,905 mc. In duplexing systems Type 5791 may be used as the companion ATR.

SYLVANIA ELECTRIC  
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OUTLINE DRAWING



NOTE 1

| REF LTR | DIMENSIONS                            |
|---------|---------------------------------------|
| A       | 1 <sup>1</sup> / <sub>4</sub> MAX DIA |
| B       | .250 DIA                              |
| C       | 2 <sup>5</sup> / <sub>16</sub> MAX    |
| D       | 2 <sup>3</sup> / <sub>4</sub> MAX     |
| E       | 3 <sup>3</sup> / <sub>4</sub> MAX     |
| F       | <sup>9</sup> / <sub>16</sub> MAX      |
| G       | .120 ± .002 DIA                       |
| H       | <sup>17</sup> / <sub>32</sub> MIN     |
| J       | .287 ± .002                           |
| K       | .287 ± .002                           |
| L       | .241 ± .002                           |
| M       | 1.009 -.999 DIA                       |
| N       | .241 ± .002                           |
| P       | 1 <sup>1</sup> / <sub>8</sub> MAX     |
| R       | .368 -.360                            |
| T       | .310 ± .005 DIA                       |

NOTE 1:  
MAX PROJECTION OF RESERVOIR  
LIES WITHIN CYLINDER OF 1 <sup>1</sup>/<sub>4</sub>  
DIA WITH AXIS CO-LINEAR WITH  
TUBE AXIS