

engineering data service

5790

MECHANICAL DATA

Mounting Position:
Ambient Temperature Range:40 to +100° C (non-operating)
Frequency Change: \triangle fo = \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 μ Adc Max.
Ignitor Voltage Drop at 100 μa				. 200 to 350 Vdc

LOW POWER LEVEL UNFIRED CHARACTERISTICS

Insertion Loss					2.0 db Max.
Ignitor Interaction at 100 μa					0.2 db Max.

HIGH POWER LEVEL FIRED CHARACTERISTICS

Leakage Power ¹							30 Mw Max.
Recovery Time1							4 μs Max.
at -3 db							

NOTE:

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1. po = 8 \text{ kw}; f = 34,860 \text{ mc}; I_z = 100 \text{ } \mu Adc; prr = 2000 \text{ } pps; tp = 0.25 \text{ } \mu s \text{ } or prr = 1000 \text{ } pps; tp = 0.5 \text{ } \mu s
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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.

The information in this EDS is furnished without assumption of responsibility on the part of Sylvania Electric Products, Inc. for its use or interpretation or for any infringement of patent or other rights of third parties resulting from such use or interpretation.

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 PRODUCTS INC.
SPECIAL TUBE OPERATIONS

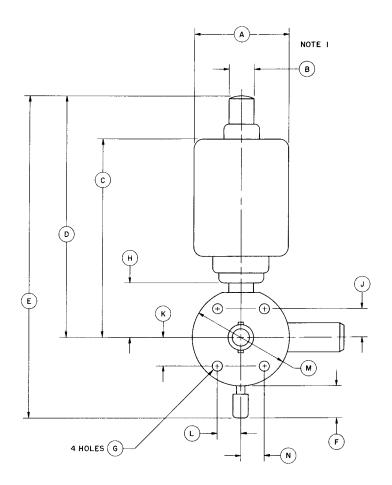
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APRIL, 1957 PAGE 1 OF 2 PAGE 2

OUTLINE DRAWING



REF LTR	DIMENSIONS
Α	I MAX DIA
В	.250 DIA
С	2 5 MAX
D	2 3 MAX
E	3 4 MAX
F	9 MAX
G	.120 ± .002 DIA
н	17. MIN
J	.287 ± .002
К	,287 ± ,002
L	.241±.002
М	1.009999 DIA
N	.241±.002
Р	I H MAX
R	.368360
Т	.310 ±.005 DIA

NOTE I:

MAX PROJECTION OF RESERVOIR

LIES WITHIN CYLINDER OF I 4

DIA WITH AXIS CO-LINEAR WITH

TUBE AXIS

