



MECHANICAL DATA

Dimensions	Per Outline	
Mounting Position	Any (two gaskets supplied with each tube)	
Ambient temperature range	(non-operating) -40 to +100°	C
Net weight (Approximately)	0.11	lbs.

ELECTRICAL DATA

GENERAL DATA

Center Frequency	9375	Mc
----------------------------	------	----

RATINGS (Absolute)

Transmitter Peak Power (min.)	4	KW
(max.)	500	KW

TYPICAL OPERATION

Power Output	200	KW
Duty Cycle	0.001	
or	1.2 to 1.0	
Frequency	9375	Mc

LOW LEVEL CHARACTERISTICS

Loaded Q (Center Frequency)	8.0	
Tuning Conductance (Center Frequency) G/Y _o	0.1	
Tuning Susceptance (Center Frequency) B/Y _o	± .06	

HIGH LEVEL CHARACTERISTICS

Arc Loss (max.) (Note 1)	0.8	db
High Level VSWR (Note 2)	1.10	
Firing Time (Note 3)	.10	sec.

Note 1: The power loss in the arc shall be less than 680 peak watts.

$$\frac{P}{P-PL} = \frac{4000}{4000-680} = 1.20 (0.8 \text{ db})$$

Note 2: P_o = 200 kw; t_p = 1.0 μsec; prr = 1000; 9375 Mc;
Load VSWR = 1.03 (max.), VSWR of tube 1.1 to 1.0

Note 3: P_o = 4 kw; t_p = 0.45 to 0.65 μsec; prr = 1000

QUICK REFERENCE DATA

The Sylvania Type 5864 is a broadband X-Band ATR gas switching tube designed to decouple effectively the transmitter from a common transmitting and receiving antenna during a non-transmitting period (used in Hi-power X-Band wave-guide RG51/U). The operational band is nominally ± 3% depending on specific application. Former type designation was ATR 321.

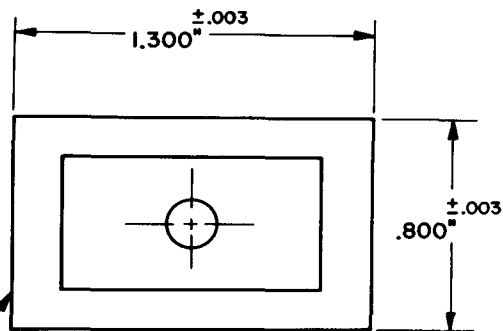
SYLVANIA ELECTRIC
PRODUCTS INC.

ELECTRONICS DIVISION
WOBBURN, MASS.

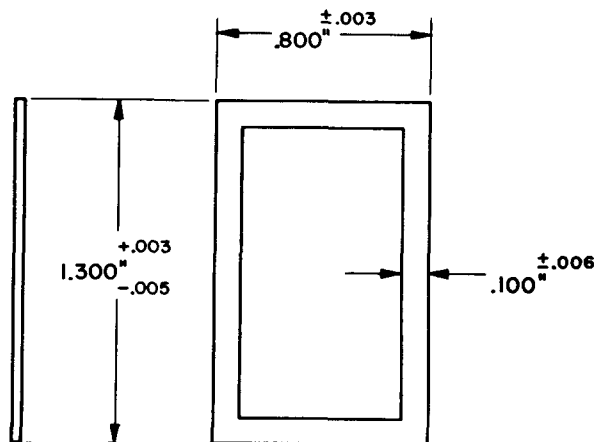
Prepared and Released by The
TECHNICAL PUBLICATIONS SECTION
EMPORIUM, PENNSYLVANIA

JULY 1956

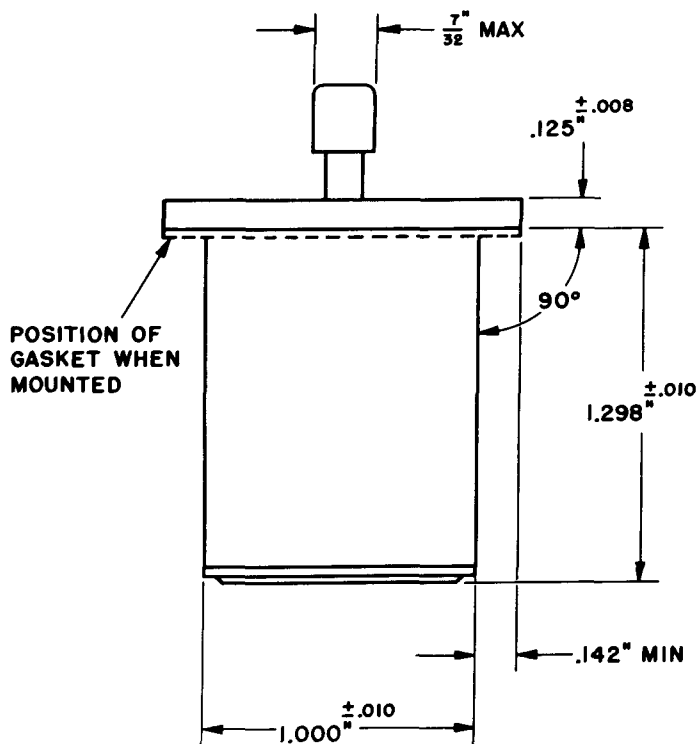
PAGE 1 OF 2



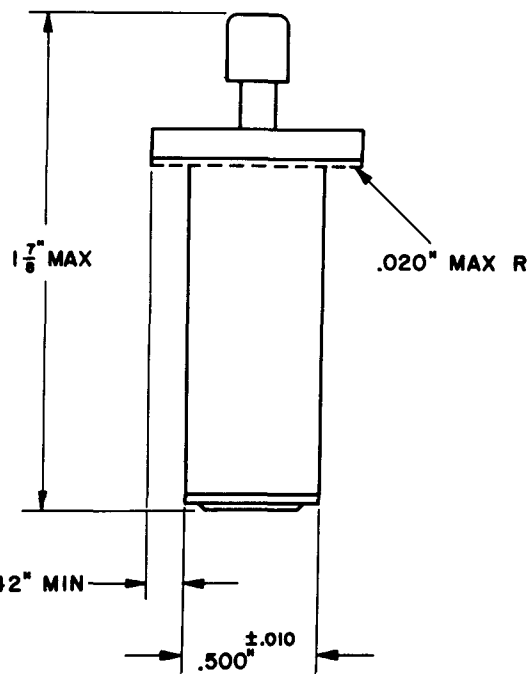
FLAT OR RECESSED
PLATE DESIGN OPTIONAL



.0030" THICK SOFT TEMPER
NICKEL OR COPPER GASKET
(2 GASKETS SUPPLIED)



POSITION OF
GASKET WHEN
MOUNTED



NOTES:

1. The tubulation shall fall within a circle of $\frac{3}{8}$ inch max. diameter located from the centerlines of the flange.
2. Silver plate 100 M.S.I. or equivalent.
3. Applies at all edges of bottom face of end plate only.
4. Centerlines of window shall coincide with corresponding centerlines of body within .015 inch. This measurement shall be made in the plane of the window.