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5864

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	
σ	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 that 680 peak watts.

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

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
WOBURN, MASS.

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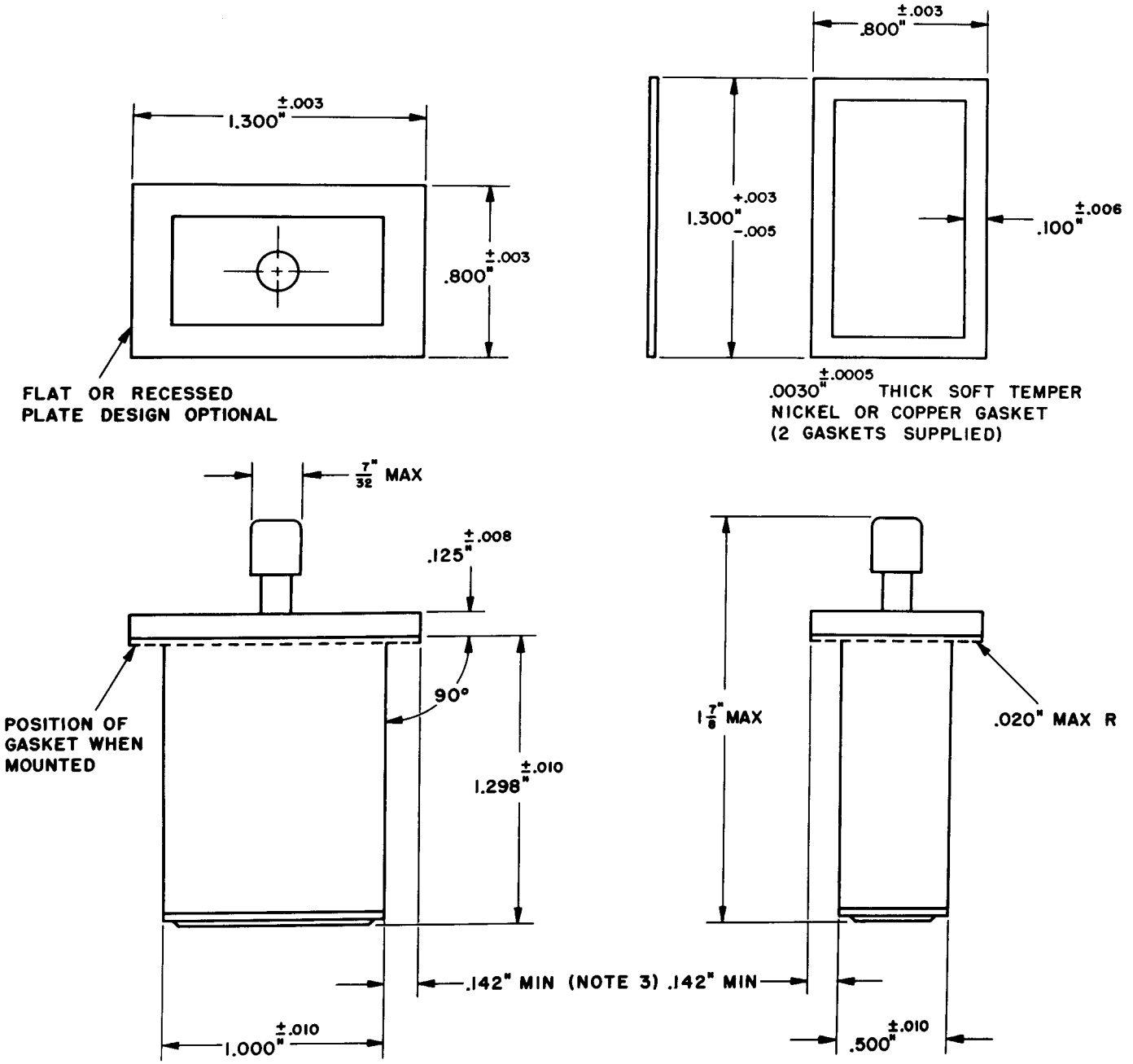

NOTES:

1. *The tubulation shall fall within a circle of 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.*