ADVANCE DATA

MECHANICAL DATA

Mounting Position	Any	
Ambient Temperature Range (Non-Operating)	-40 to +100°	C
Dimensions	Per Outline	
Net Weight (Approx.)	0.13	Pound

ELECTRICAL DATA

RATINGS

Transmitter Peak Power	4	Kw	Min.
	250	Kw	Max.

GENERAL DATA

Center Frequency	9050	Mc	
Loaded Q	6.5	Max.	
Tuning Susceptance $B/_{Yo}$	±0.06		
Electrical Symmetry [1]	0.06	Cm	Max.
Equivalent Conductance $G/_{Yo}$	0.06	Max.	
Arc Loss (4 Kw) [2]	1.3	db	Max.
Recovery Time (20 Kw) [3]	8.0	µsec	Max.
High Level VSWR (20 Kw)	1.12	Min.	
	1.27	Max.	
Firing Time (4 Kw)	10	Seconds	Max.

NOTES:

1. The shift in the position of the minimum measured in RG-51/U waveguide, caused by reversing the tube in the mount shall be within the limits specified.

2. At a peak power of 4 Kw, pulse repetition rate of 1000 pps, pulse width of 0.5 µsec, and frequency of 9050 mc.

3. With line power of 20 Kw peak, the shift in position of the minimum from unfired position to 0.05 λ g (when fired) nearer the magnetron in specified time.

QUICK REFERENCE DATA

The Sylvania Type 6163 is an X-band ATR tube designed for application in pairs or singly (with the proper waveguide) in conjunction with the 6164 TR.

SYLVANIA ELECTRIC PRODUCTS INC.

ELECTRONICS DIVISION
WOBURN, MASS.

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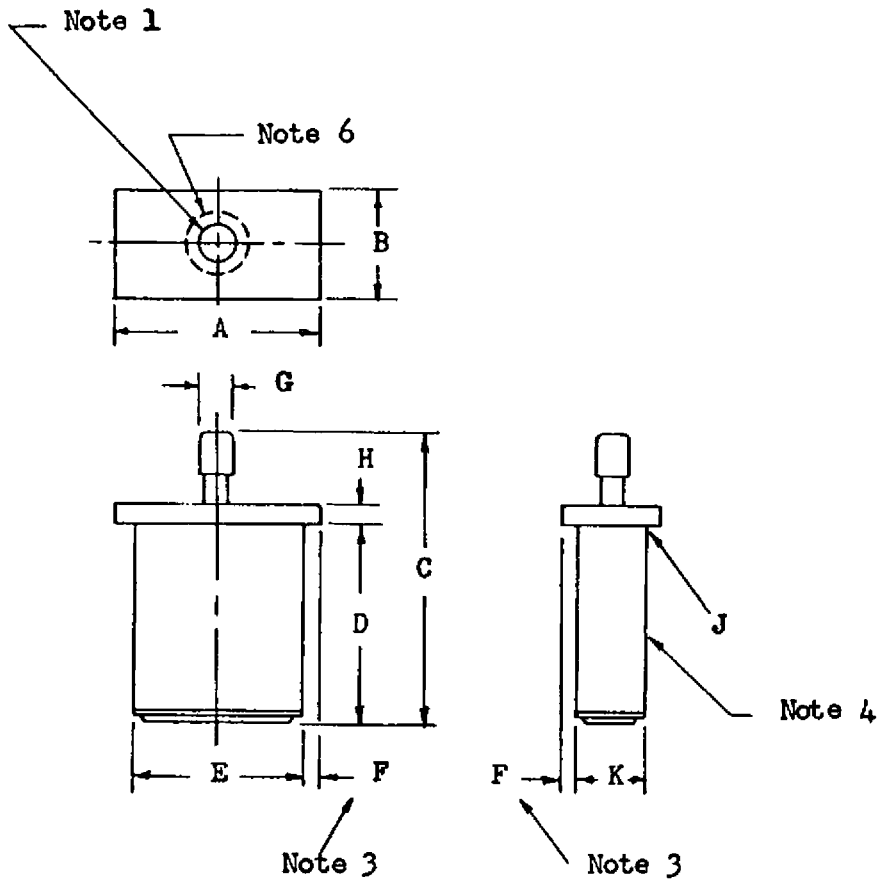
APPLICATION DATA

The Sylvania Type 6163 ATR is recommended in conjunction with 6164 TR for application in amplitude sensitive monopulse systems employing RG-51/U waveguide.

The tube is designed to be used either in pairs mounted opposite each other in the wide walls of RG-51/U waveguide for high power broadband applications or singly in reduced impedance (1/2 height) RG-51/U waveguide. The tube may be used at peak powers exceeding 250 Kw under proper pulse conditions, where average power is maintained at 250 watts. For operation under these conditions consult manufacturer.



Ref.	Dimensions
A	1.275" ±.010"
B	.775" ±.005"
C	1 23/32" Max.
D	1.299" ±.003"
E	1.000" ±.005"
F	.125" Min.
G	9/32" Dia. Max.
H	.125" ±.008"
J	.020" R. Max.
K	.500" ±.005"

NOTES:

1. The tubulation shall fall within a circle of 7/16" max. dia. located from the centerlines of the flange.
2. Silver plate 100 M.S.I. or equivalent.
3. Applies to four walls for full length up to radius J, and to window end plate.
4. Four long edges of tube body shall have approx. radius .020" ±.010".
5. A radius of 1/32" max. or a chamfer of 1/64" x 45° max. will be permitted on the corners of the window end plate.
6. Spread of solder to be held within 7/16" dia. area as shown.
7. Window plate optional flat or lipped.