



ADVANCE DATA

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QUICK REFERENCE DATA

The Sylvania Type 6796 is a dual X-band TR tube designed for broad band operation in the 8500-9600 Mc frequency region. It is similar to the 6334, but shorter physically. Type 6796 was formerly TR703.

MECHANICAL DATA

Ambient Temperature Range (Non-Operating) $-40 \pm 100^{\circ} \text{C}$
Outline See Drawing
Mounting Position Any
(Use 3 db Short Slot Hybrid Couplers)

ELECTRICAL DATA ¹

FREQUENCY RANGE 8490-9578 Mc

VSWR Presented to Antenna ²			
8490 Mc	1.4		Max.
8565-9487 Mc	1.2		Max.
9578 Mc	1.4		Max.
VSWR Presented to Transmitter			
8490-9578 Mc	1.2		Max.

($P_o = 40 \text{ Kw}$, Pulse Width = 1.0 usec,
prf = 1000 pps)

IGNITOR CHARACTERISTICS

Open Circuit Voltage	-700 Volts d c	
Current (Each Ignitor)	100 ua d c	
Voltage Drop (Each Ignitor)	-200 to -375 Volts d c	
Ignition Time (Each Ignitor)	5 Sec.	Max.

LOW POWER LEVEL UNFIRED CHARACTERISTICS ²

Duplexer Loss ($I_i = 100 \text{ ua}$)

8490 Mc	1.0 db	Max.
8565 Mc	0.9 db	Max.
9000 Mc	0.9 db	Max.
9487 Mc	0.9 db	Max.
9578 Mc	1.0 db	Max.

HIGH POWER LEVEL FIRED CHARACTERISTICS

Flat Leakage Power (40 Kw)	20 Mw	Max.
Spike Leakage Energy (40 Kw)	.1 erg	Max.
Recovery Time (200 Kw)	7 usec	Max.
Arc Loss (4 Kw)	0.8 db	Max.

NOTES:

- The following shall be conducted with the 6796 mounted between two short slot hybrid couplers. The VSWR of the hybrids shall not exceed 1.10 from 8490 to 9578 megacycles. Each hybrid shall split the power evenly within 0.25 db.
- The tube is mounted between the two short slot hybrid junctions with a matched load on the dummy load arm. The movable short on the magnetron arm is shifted through all phases.

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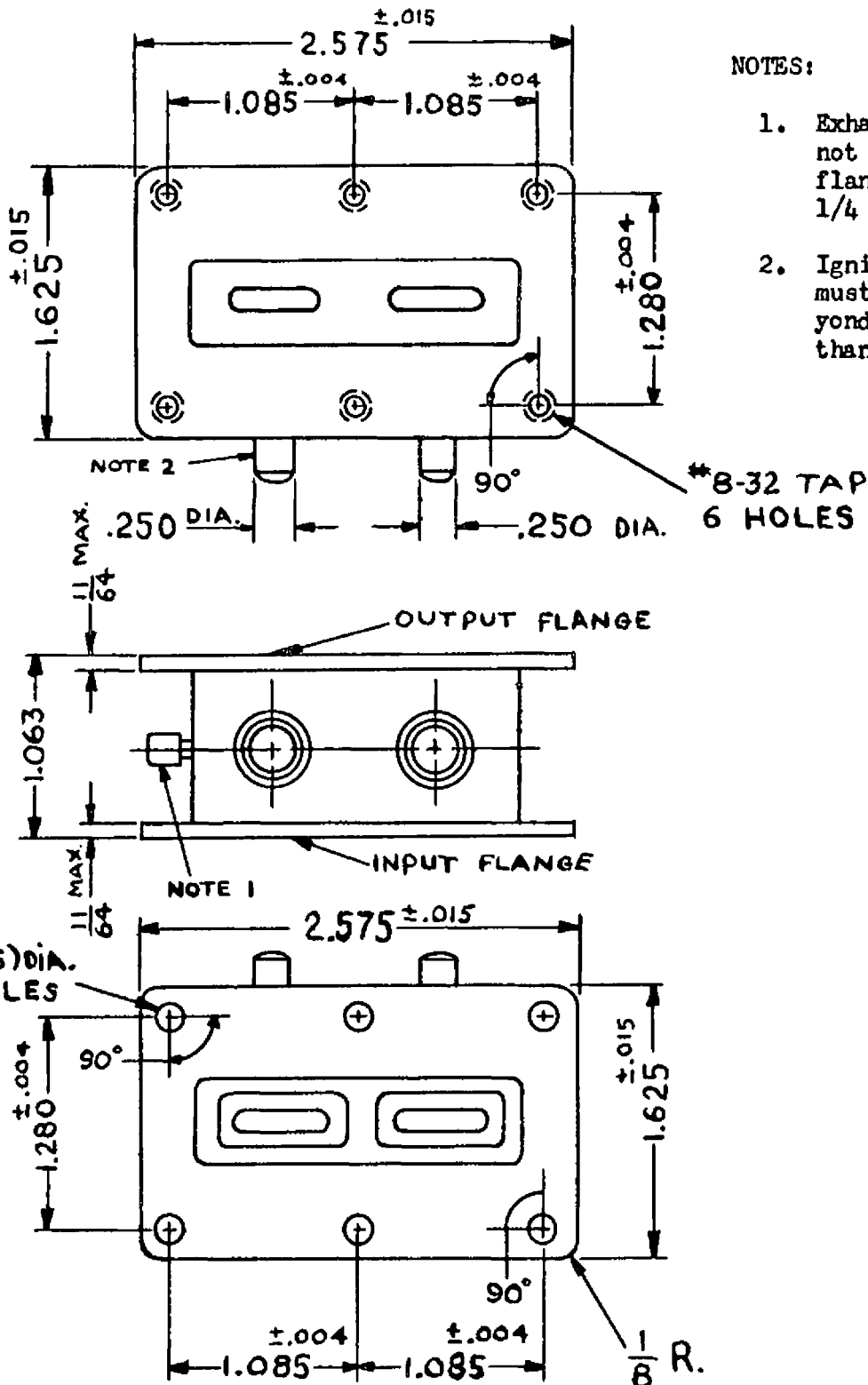
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APPLICATION DATA

The 6796 was designed for use with short slot hybrid junctions to give broad band coverage in the X-band region. Duplexer performance equivalent to that obtainable with a 6334 can be obtained with a more compact physical package.

OUTLINE DRAWING



NOTES:

1. Exhaust tube must not extend beyond flanges more than 1/4 inches.
2. Ignitor terminals must not extend beyond flanges more than 7/16 inches.