



ADVANCE DATA

MECHANICAL DATA

Ambient Temperature Range (Non-Operating) -40 to +100° C
 Outline See Drawing
 Mounting Position Any
 (Use 3db Short Slot Hybrid Couplers)
 (Either end may be used as input or output)

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.
--------------	-----	------

($p_o = 40$ Kw, Pulse Width = 1.0 usec,
 prr = 1000 pps)

IGNITOR CHARACTERISTICS

Open Circuit Voltage	-700 Volts d c	
Current	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 ($I_1 = 100$ 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.
Recovery Time (100 Kw)	5 usec.	Max.
Arc Loss (4 Kw)	0.8 db	Max.

QUICK REFERENCE DATA

The Sylvania Type 6797 is a miniaturized dual X-band TR tube featuring re-versible contact type mounting. It is a broad band tube for use in balanced duplexers in the 8500-9600 Mc frequency region. The Type 6797 was formerly Type TR823.

SYLVANIA ELECTRIC
 PRODUCTS INC.

ELECTRONICS DIVISION
 WOBURN, MASS.

Printed and Released By The
 TECHNICAL PUBLICATIONS SECTION
 EMPORIUM, PENNSYLVANIA

October 14, 1955

Page 1 of 3

SYLVANIA

6797

Page 2

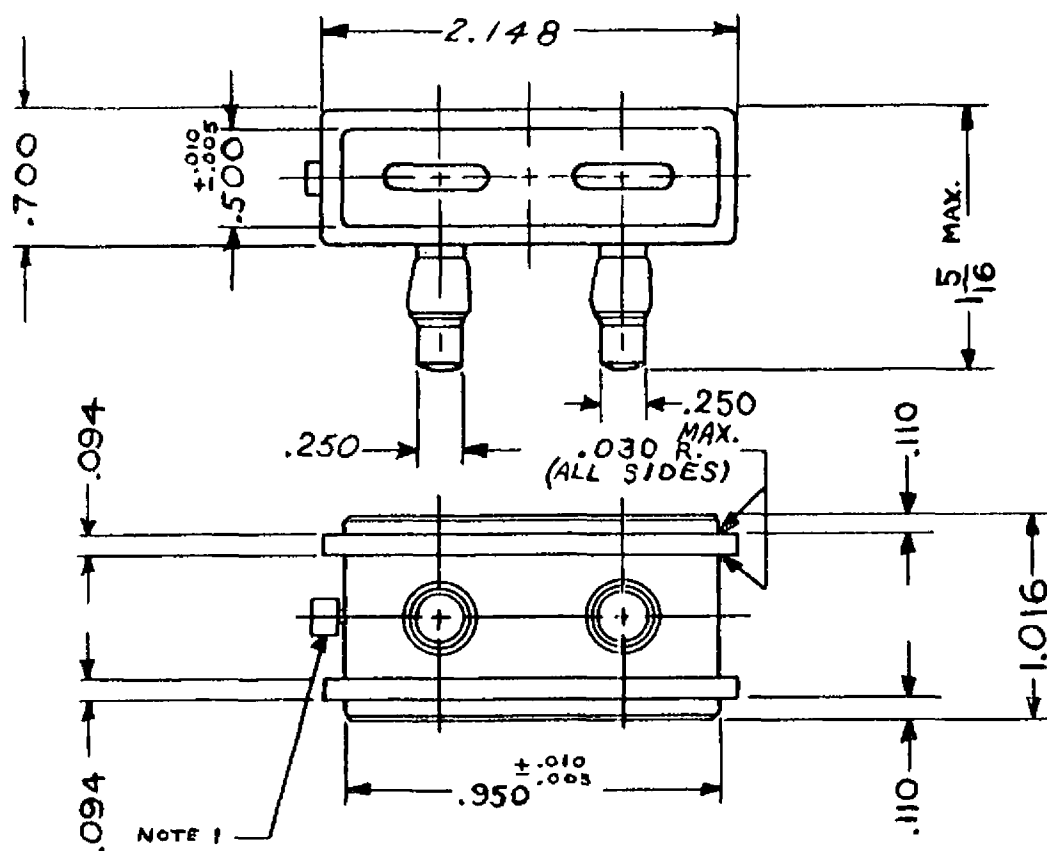
NOTES:

1. The following shall be conducted with the 6797 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.
2. The tube is mounted between the 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.

APPLICATION DATA

The 6797 was developed for balanced duplexer application using short slot hybrid junctions in which small physical size is a major requirement. Bulky flanges have been eliminated by the use of slip-in construction. This type of mounting is adaptable to quick disconnect designs.

OUTLINE DRAWING



NOTES:

1. Exhaust tube must not extend beyond flanges more than $3/16$ inches.
2. The 6797 uses two gaskets as shown.

