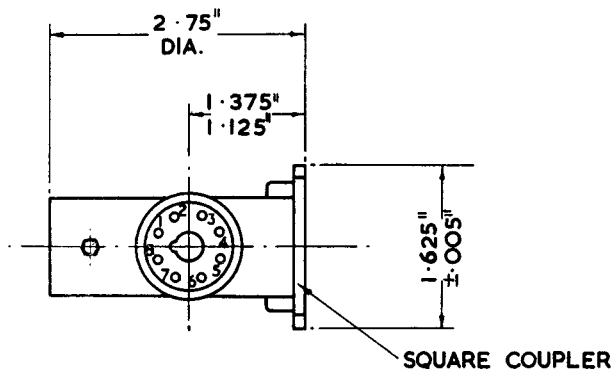
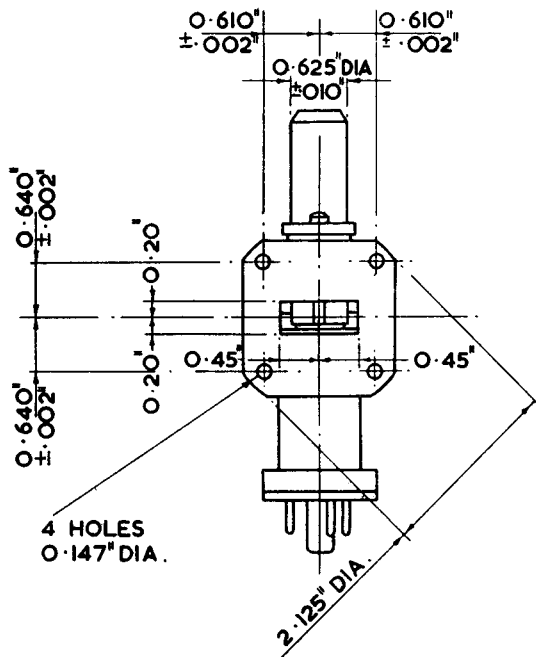
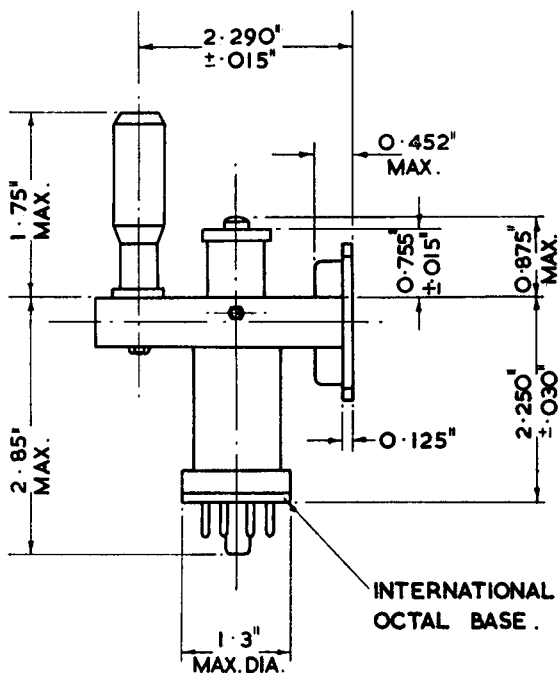




Klystron Type K312



PIN No.	CONNECTIONS
1	BLANK
2	HEATER
3	BLANK
4	BLANK
5	RESONATOR
6	BLANK
7	HEATER & CATHODE
8	BLANK
CAP	REFLECTOR

General. The Klystron K312 has been designed for use with systems using standard American waveguides having internal dimensions of 0.9 in. x 0.4 in.

MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED

Head Office: Marconi House, Chelmsford, England. Telephone: Chelmsford 3221. Telegraphic Address: Expanse, Chelmsford

APPROXIMATE DATA

V_h	6.3	V
I_h	0.6	A
V_{bm}	350	V
I_{bm}	35	mA
$V_{reflector}$	-110 to -180	V
P_{out} (a)	25	mW
f (mechanical tuning range)	9430 to 9650	Mc/s
f (electronic tuning range) (b)	30	Mc/s

(a) At 350 V between cathode and resonator.

(b) The electronic tuning is obtained with a reflector voltage sweep of approximately 15 V.

NOTES

1. Each klystron is marked with the reflector voltage at which the klystron will oscillate and give a power output of at least 10 mW over the whole mechanical tuning range.
 2. The reflector voltage must always remain negative with respect to the cathode. If under AFC working there is any chance of the reflector voltage becoming equal to or more positive than the voltage of the cathode, a protective diode must be fitted at the reflector.
 3. The total impedance in the reflector-cathode circuit must not exceed 0.5 Megohms.
 4. Tuning is obtained by means of a reactive stub intruding into the waveguide. This stub may be operated by means of the micrometer (shown in the outline) or remotely by means of a shaft engaging the $\frac{1}{8}$ in. dia. pin mounted across the diameter of a $\frac{1}{4}$ in. hole recessed in the micrometer.
-