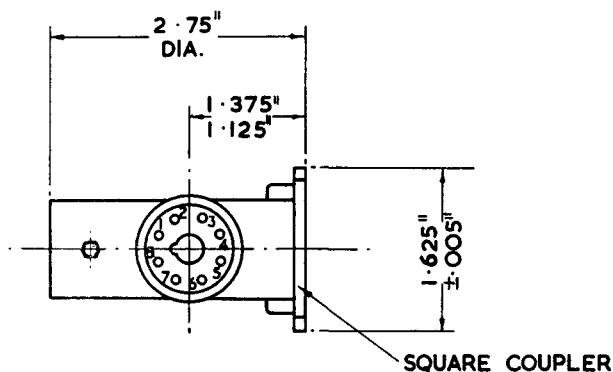
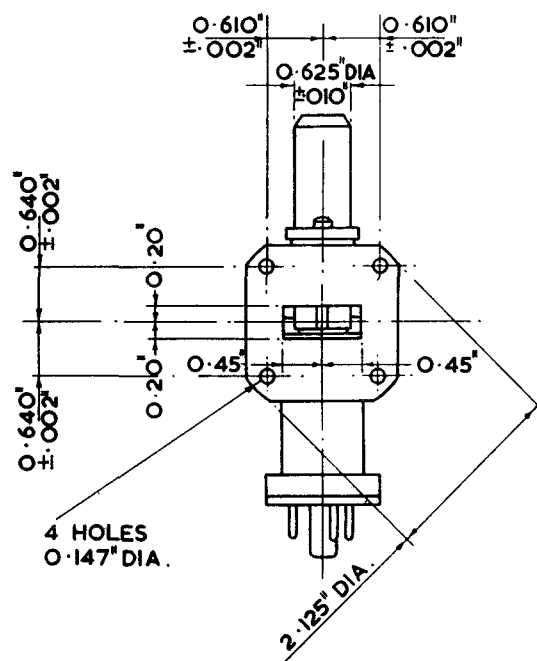
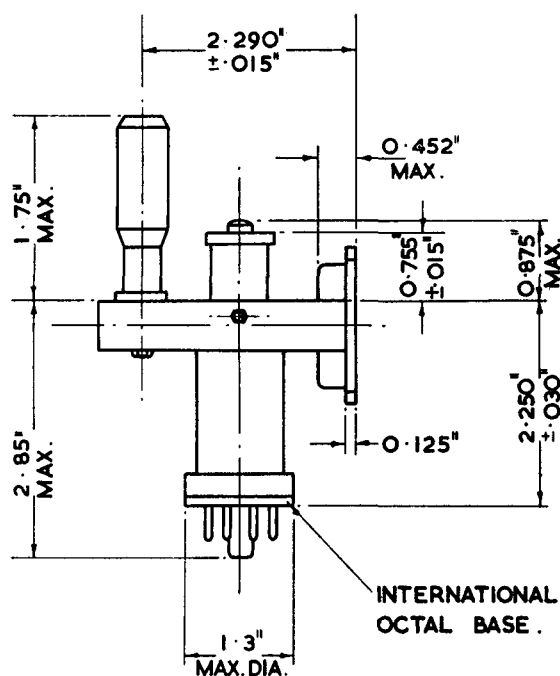




Klystron Type K312



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

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

MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED

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

APPROXIMATE DATA			NOTES
V_h	6.3	V	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.
I_h	0.6	A	
V_{bm}	350	V	
I_{bm}	35	mA	
$V_{\text{reflector}}$	-110 to -180	V	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.
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.			3. The total impedance in the reflector-cathode circuit must not exceed 0.5 Megohms.
(b) The electronic tuning is obtained with a reflector voltage sweep of approximately 15 V.			
			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 $\frac{1}{16}$ in. dia. pin mounted across the diameter of a $\frac{1}{4}$ in. hole recessed in the micrometer.