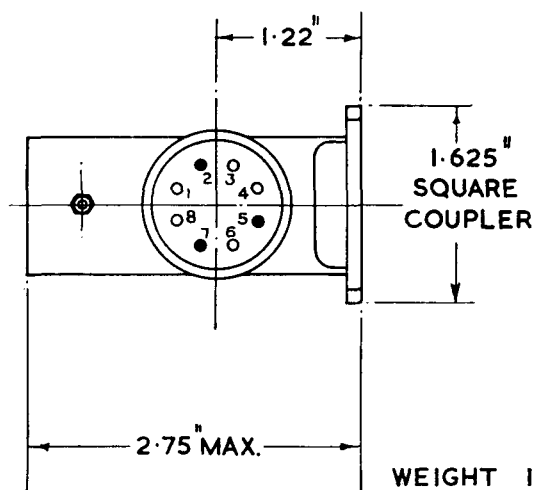
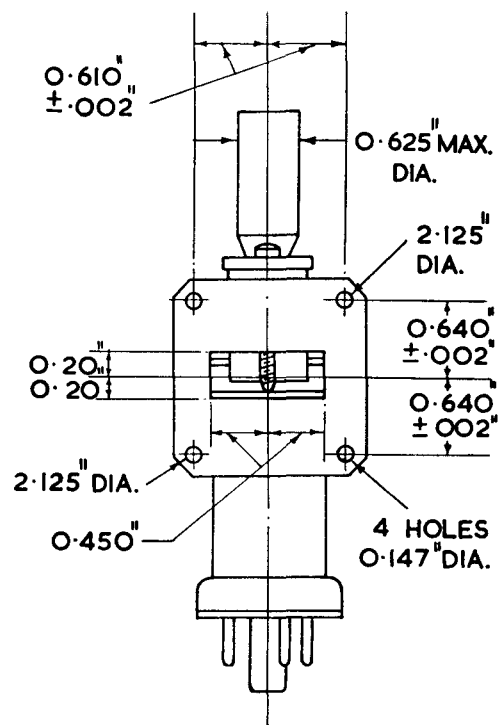
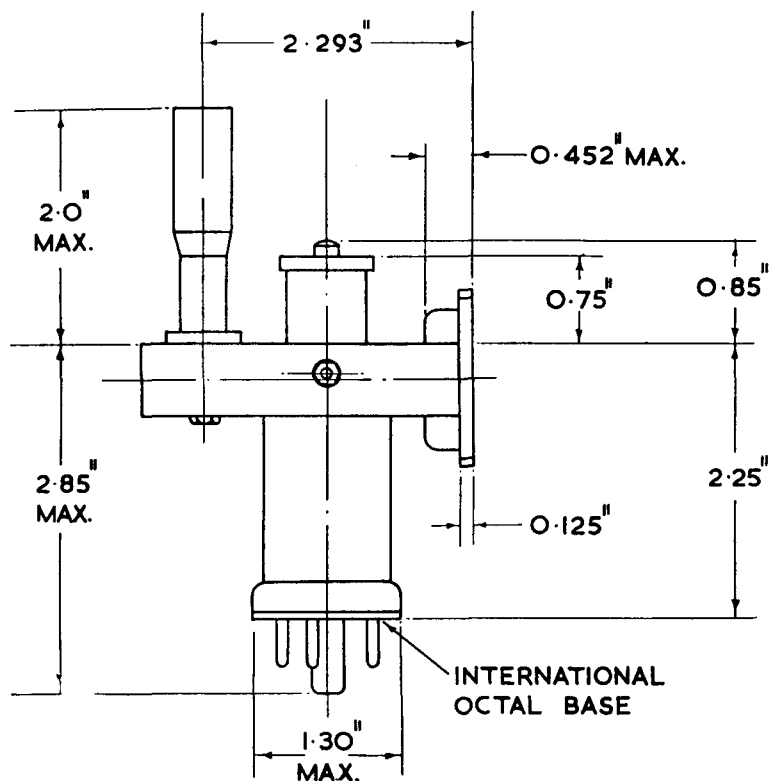




Klystron Type K302



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

Chelmsford, Essex, England. Telephone: Chelmsford 3221. Telex: 1953. Telegrams: Expanse Chelmsford Telex

General. The K 302 klystron has been designed for use as the local oscillator in a superheterodyne receiver operating in the band 9320–9500 Mc/s (the 3 cm. band).

It is for use with systems using the standard American waveguide; the internal dimensions of which are 0.9 in. $\times$ 0.4 in.

APPROXIMATE DATA

V_h	6.3	V	f (Mechanical tuning range)	9320–9500	Mc/s
I_h	0.6	A	f (Electronic tuning range) (b)	30	Mc/s
V_{bm}	350	V	(a) At 350 V between cathode and resonator.		
I_{bm}	35	mA	(b) The electronic tuning is obtained with a reflector voltage sweep of approximately 20 V.		
$V_{\text{reflector}}$ (max range)	—90 to —155	V			
P_{out} (min) (a)	30	mW			

NOTES

- (1) Each klystron is marked with the reflector voltage at which it will oscillate and give an output power of at least 12 mW over the whole frequency band.
- (2) At no time should the voltage of the reflector be allowed to become equal to or more positive than the cathode: if under AFC working there is any chance of this happening, a protective diode should be fitted at the reflector.
- (3) The total impedance in the reflector to cathode circuit must not exceed 0.5 M Ω .
- (4) Tuning is effected by means of a reactive stub intruding into the waveguide. This stub may be operated directly by means of the micrometer 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.

