

Frequency: 7Gc/s. band. Mechanical tuning.  
 Power output: 50mW minimum.  
 Construction: All metal, coaxial output probe.  
 Application: Local oscillator, signal generator.

This data should be read in conjunction with GENERAL OPERATIONAL RECOMMENDATIONS—MICROWAVE DEVICES: INTRODUCTION and REFLEX KLYSTRONS which precede this section of the handbook.

**CHARACTERISTICS**

	Min.	Max.	
Mechanical tuning range	6.5	7.5	Gc/s
Electronic tuning range, between half power points at any frequency in the mechanical tuning range	25	—	Mc/s
Power output at 7Gc/s ± 20Mc/s (principal mode)	85	—	mW
Power output at any other frequency in the band	50	—	mW
Reflector voltage for maximum power output at 7Gc/s ± 20Mc/s	-100	-175	V
Reflector voltage range, inclusive of electronic tuning range	-60	-215	V
Frequency change with temperature	—	500	kc/s per °C

**CATHODE**

Indirectly heated

$V_h$		6.3	V
$I_h$		500	mA

**OPERATING CONDITIONS IN SPECIFIED MOUNT**

f		7.0	Gc/s
$V_{resonator}$		300	V
$I_{resonator}$		24	mA
$V_{reflector}$		-140	V
$I_{reflector}$		1.0	μA
Electronic tuning range between half power points		38	Mc/s
$P_{out}$		100	mW

**COOLING**

Natural

**ABSOLUTE RATINGS**

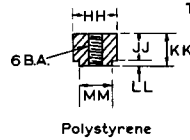
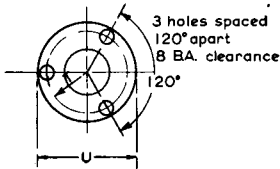
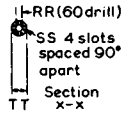
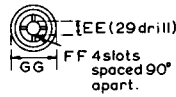
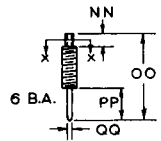
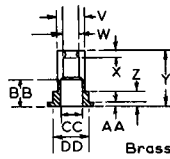
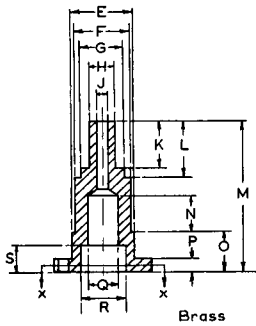
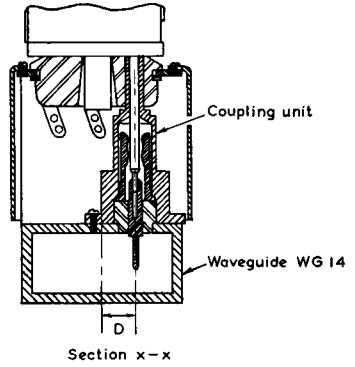
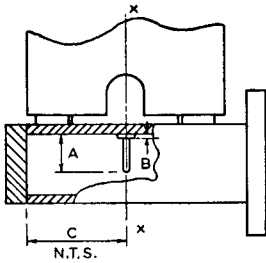
$V_{resonator}$ max.		350	V
$I_{resonator}$ max.		37	mA
$V_{reflector}$ max.		-1.0 to -400	V
$V_{h-k}$ max.		-150	V
$T_{amb}$ (shell) max.		110	°C
$T_{coaxial\ line}$ max.		90	°C

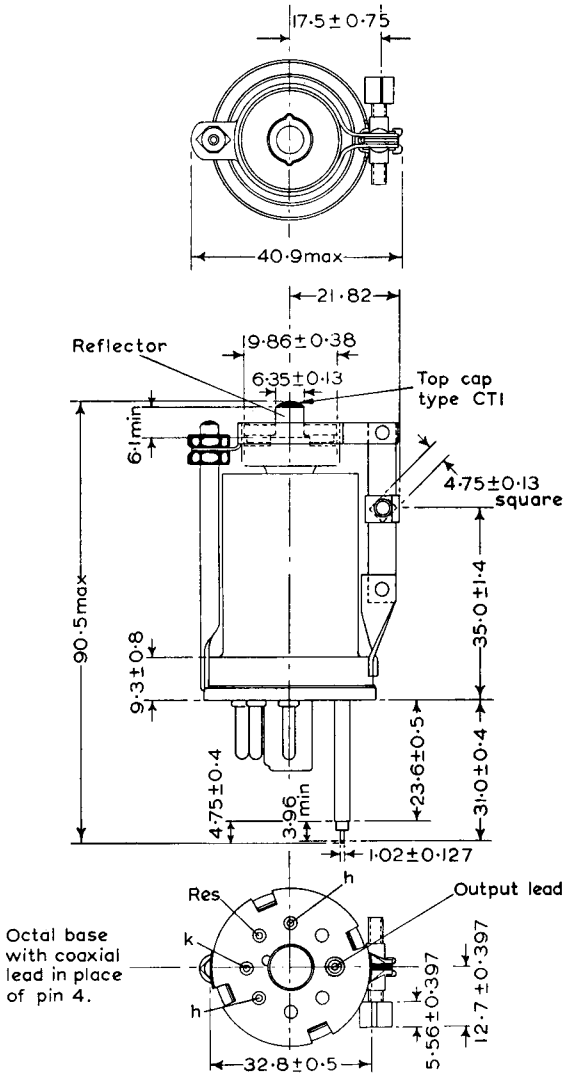
**OPERATING NOTE**

The prescribed tuning range is covered by five turns of the mechanical tuning screw. ←

	<i>Inches</i>	<i>Millimetres</i>
A	0.370±0.005	9.398±0.127
B	0.045	1.143
C	0.315	8.001
D	0.333	8.458
E	0.5625	14.287
F	0.5	12.7
G	0.390	9.90
H	0.25	6.350
J	0.145	3.683
K	0.475	12.065
L	0.568	14.427
M	1.5	38.1
N	0.5	12.7
O	0.375	9.525
P	0.125	3.175
Q	0.314	7.976
R	0.468	11.887
S	0.250	6.350
T	0.375	9.525
U	1.000	25.4
V	0.281	7.137
W	0.15	3.81
X	0.1	2.54
Y	0.53	13.462
Z	0.125	3.175
AA	0.020	0.508
BB	0.250	6.350
CC	0.250	6.350
DD	0.312	7.925
EE	0.136	3.454
FF	0.015×0.313	0.381×7.950
GG	0.438	11.131
HH	0.468	11.887
JJ	0.230	5.842
KK	0.292	7.417
LL	0.062	1.575
MM	0.375	9.525
NN	0.088	2.235
OO	0.750	19.05
PP	0.325	8.255
QQ	0.040	1.016
RR	0.040×0.186	1.016×4.724
SS	0.010×0.180	0.254×4.572
TT	0.095	2.413

6308





6331

All dimensions in mm