### RADAR TUBE

MF31-95

Direct viewing radar tube with 12-in. diameter flatfaced metal-backed long persistence screen. Primarily intended for use in p.p.i. applications.

This data should be read in conjunction with GENERAL OPERATIONAL RECOMMENDATIONS—CATHODE RAY TUBES, included in this volume of the handbook.

## HEATER

Suitable for series or parallel operation.

Vh	6.3	V
I <sub>h</sub>	300	mΑ

### **CAPACITANCES**

$c_{g-all}$	< 8.0	pF pF
C <sub>k</sub> all	<:8.0	рF

### **SCREEN**

Metal-backed
Fluorescent colour orange—with orange afterglow
Persistence long
Min. useful screen diameter 265 mm

#### FOCUSING

Magnetic

#### **DEFLECTION**

Double magnetic

## MOUNTING POSITION

Any, except with the screen downwards and the axis of the tube making an angle of less than 20° with the vertical.

#### TYPICAL OPERATING CONDITIONS

$V_{\mathrm{a}2}$	10	k۷
*V <sub>a1</sub>	800	٧
Vg for cut-off	–50 to <b>–</b> 115	٧
V		

\*Recommended distance of centre of magnetic length of focus unit from reference line 98 mm

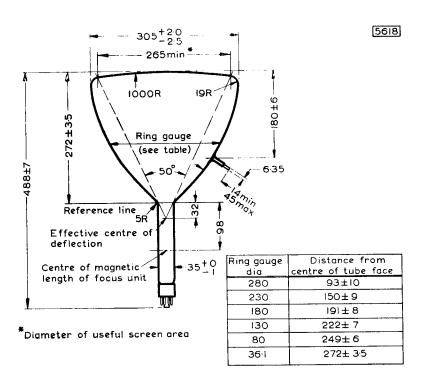
\*See appropriate section of 'General Operational Recommendations—Cathode Ray Tubes'.

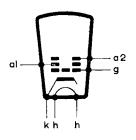
# LIMITING VALUES (absolute ratings)

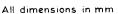
V <sub>a2</sub> max.	12	k٧
V <sub>a2</sub> min.	8.0	k٧
V <sub>a1</sub> max.	850	٧
V <sub>a1</sub> min.	250	٧
-V <sub>g</sub> max.	200	V
tl <sub>k</sub> max.	150	μΑ
$V_{h-k}$ max.	1- <b>150</b>	· v
R <sub>g-k</sub> max.	1.5	$M\Omega$
$R_{h-k}$ max.	1.0	$M\Omega$

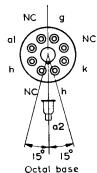
†This tube has a magnesium fluoride screen which is liable to burn if a stationary or slowly moving spot is used, even with low values of mean beam current.



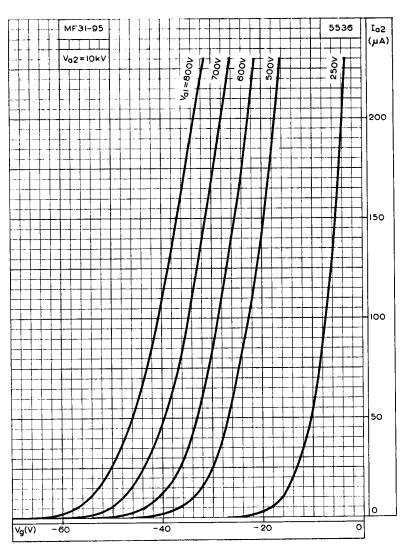






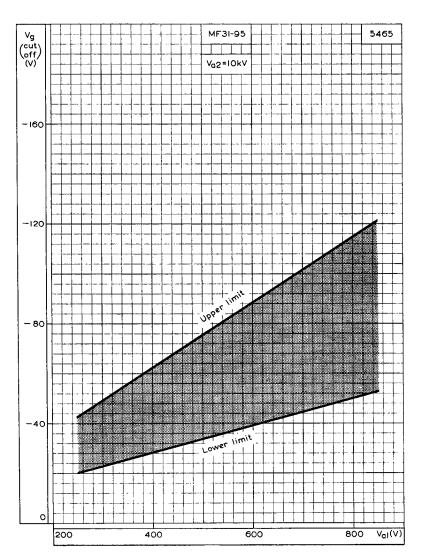






FINAL ANODE CURRENT PLOTTED AGAINST GRID VOLTAGE





LIMITS OF GRID CUT-OFF VOLTAGE FOR FIRST ANODE VOLTAGES FROM 250V TO 850V.

