

RADAR TUBE

MF31-95

Direct viewing radar tube with 12-in. diameter flat-faced 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.

V_h	6.3	V
I_h	300	mA

CAPACITANCES

C_g - all	≤ 8.0	pF
C_k - all	≤ 8.0	pF

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

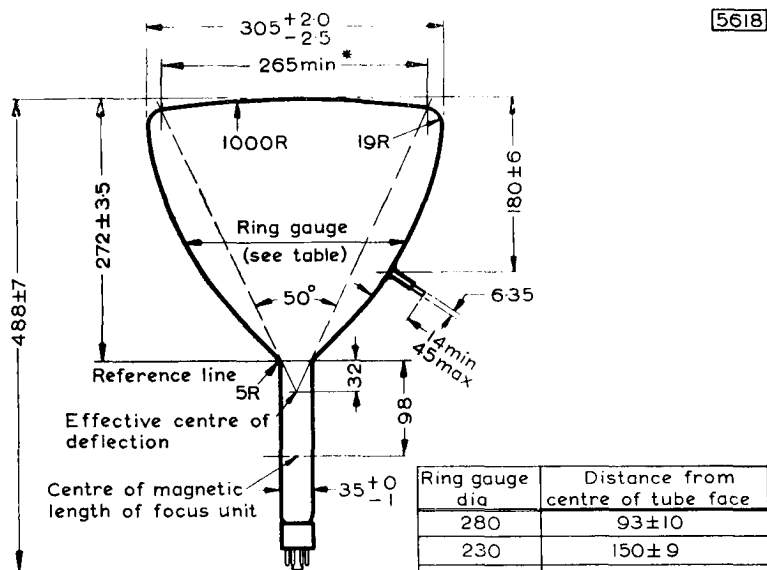
V_{a2}	10	kV
* V_{a1}	800	V
V_g for cut-off	-50 to -115	V
*Recommended distance of centre of magnetic length of focus unit from reference line	98	mm

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

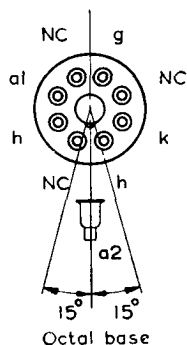
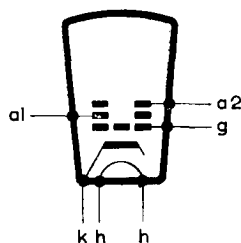
LIMITING VALUES (absolute ratings)

V_{a2} max.	12	kV
V_{a2} min.	8.0	kV
V_{a1} max.	850	V
V_{a1} min.	250	V
$-V_g$ max.	200	V
$\dagger I_k$ max.	150	μA
V_{h-k} max.	150	V
R_{g-k} max.	1.5	M Ω
R_{h-k} max.	1.0	M Ω

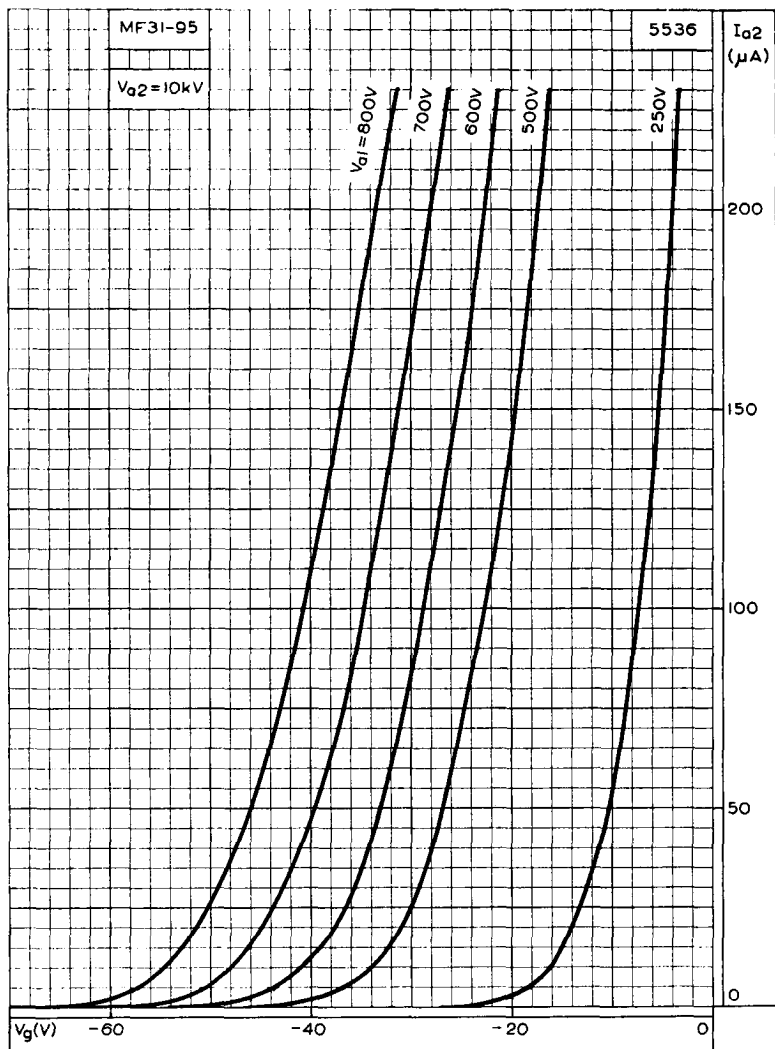
$\dagger$ This tube has a magnesium fluoride screen which is liable to burn if a stationary or slowly moving spot is used, even with low values of mean beam current.



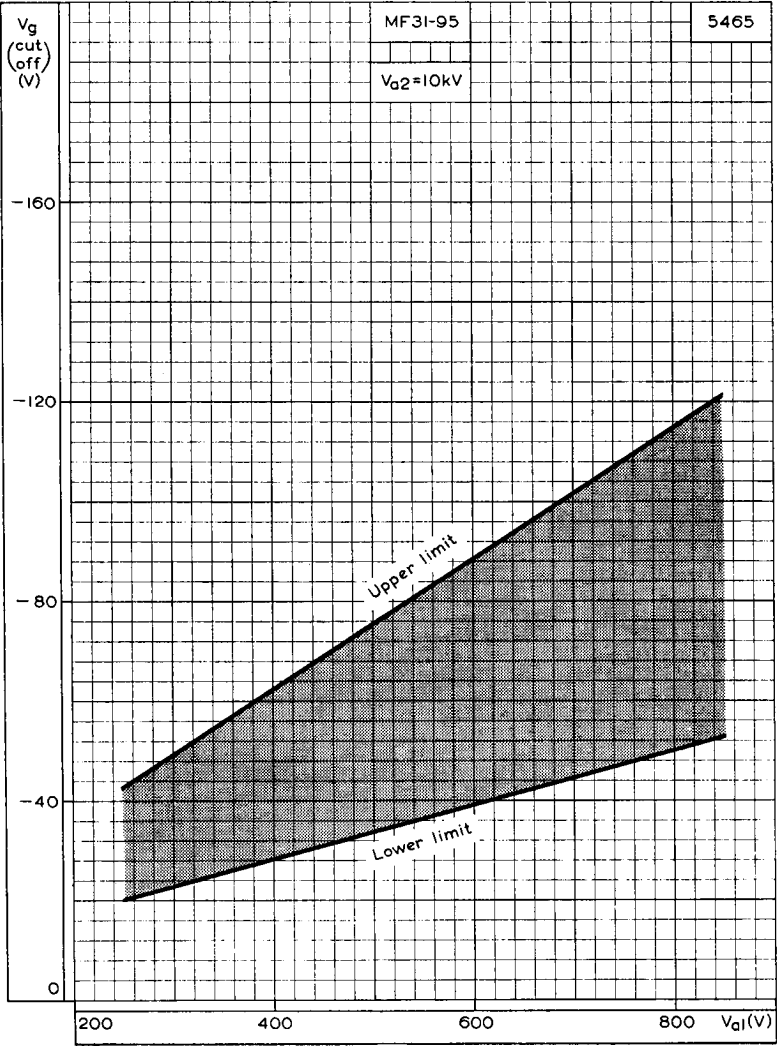
* Diameter of useful screen area



All dimensions in mm



FINAL ANODE CURRENT PLOTTED AGAINST GRID VOLTAGE



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