

RADAR TUBE

MM13-10

Direct-viewing high brightness radar tube with 5-in. diameter metal-backed double layer screen and external lacquered coating.

This data should be read in conjunction with GENERAL OPERATIONAL RECOMMENDATIONS — CATHODE RAY TUBES which precede this section of the handbook.

HEATER

Suitable for series or parallel operation

V_h	6.3	V
I_h	300	mA

CAPACITANCES

C_{g-a11}	<9.0	pF
C_{k-a11}	<7.0	pF
C_{a-11}	500 to 1500	pF

SCREEN

Metal-backed		
Double layer		
Fluorescent colour	blue with green-yellow afterglow	
Useful screen diameter	100	mm

PERSISTENCE

Blue fluorescence of short persistence followed by green-yellow phosphorescence of long persistence.

FOCUSING

Magnetic

DEFLECTION

Double magnetic	
Deflection angle (approx.)	40°

MOUNTING POSITION

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

OPERATING CONDITIONS

V_a	22	kV
V_g for cut-off	-50 to -100	V

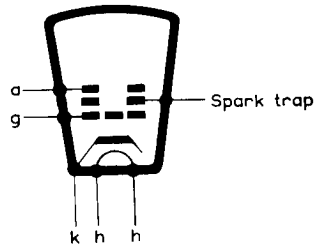
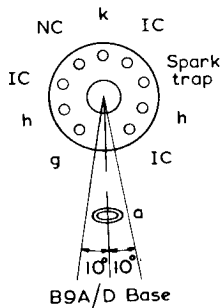
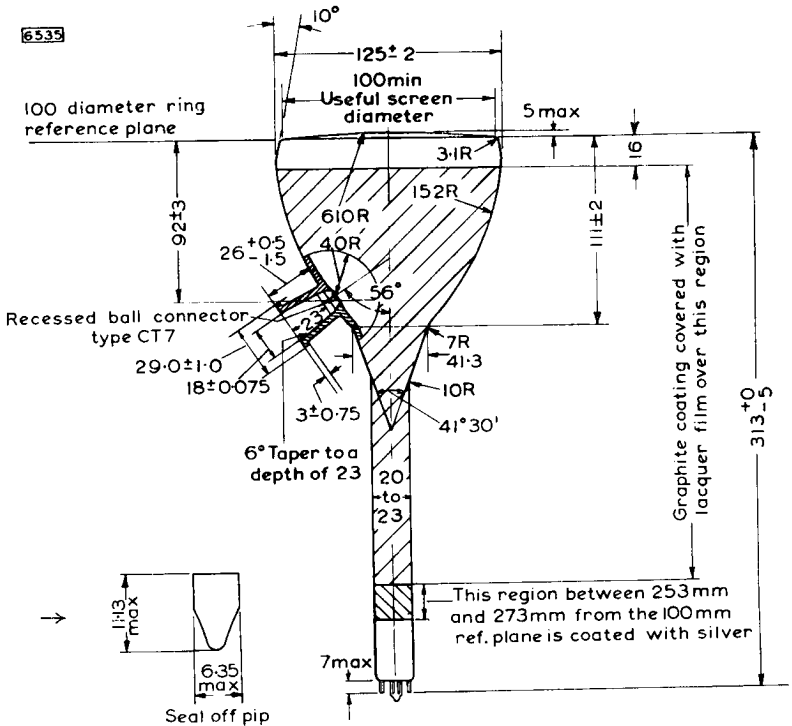


LIMITING VALUES (absolute ratings)

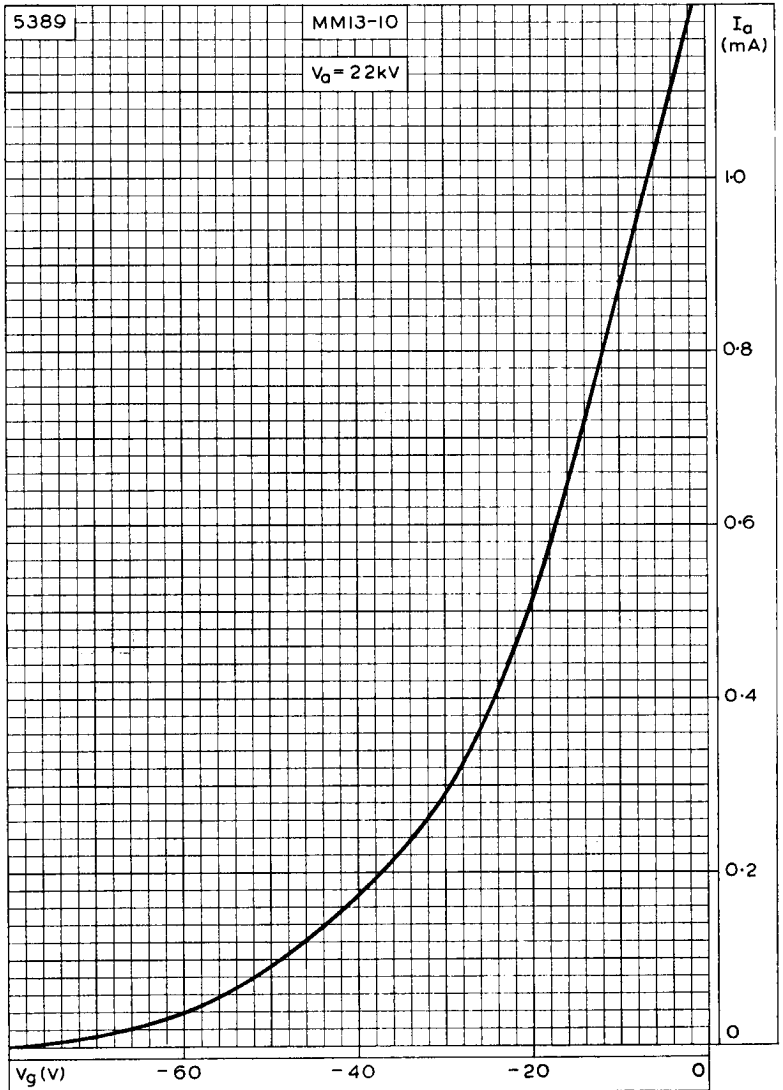
V_a max.	27	kV
V_a min.	18	kV
$-V_g$ max.	150	V
$+V_g$ max.	0	V
$+V_{g(pk)}$ max.	2.0	V
I_k max.	200	μ A
R_{g-k} max.	1.5	M Ω
V_{h-k} max. (cathode positive)	300	V
V_{h-k} max. (cathode negative)	90	V

WARNING

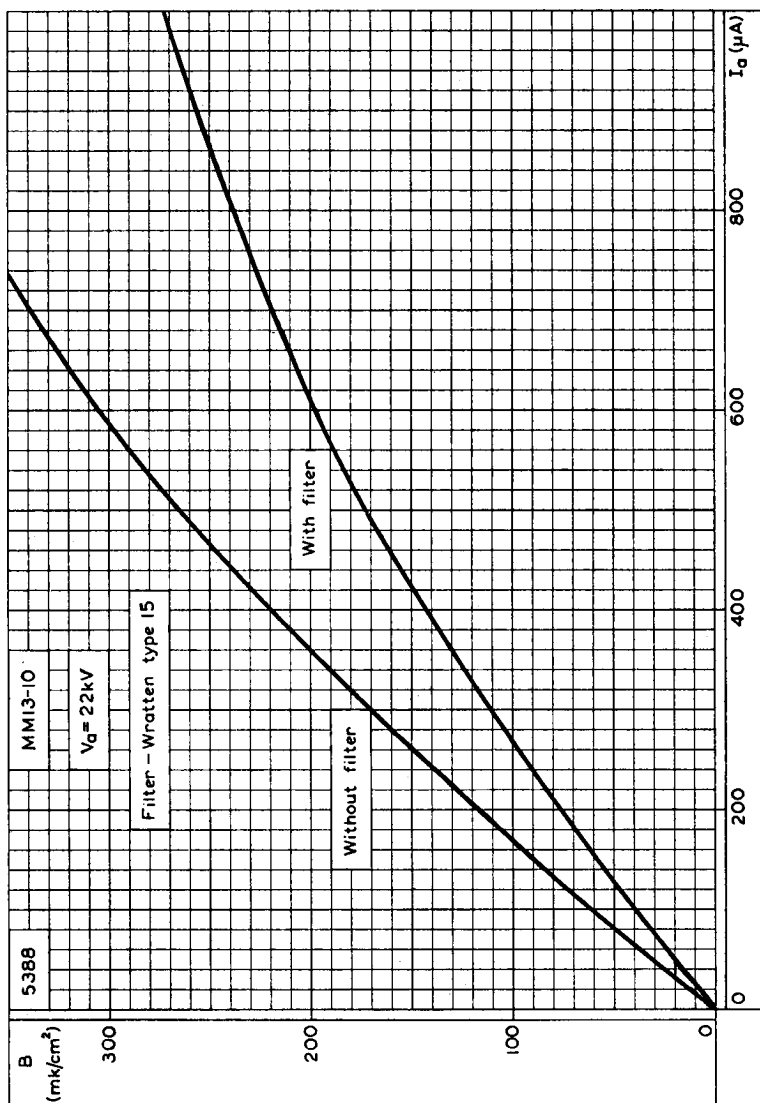
At $V_a = 27$ kV and $I_a = 200 \mu$ A, the level of 'X' radiation expected may be of the order of 10 mr/hr, and adequate shielding must be provided.



All dimensions in mm



FINAL ANODE CURRENT FLOTTED AGAINST GRID VOLTAGE



LIGHT OUTPUT PLOTTED AGAINST FINAL ANODE CURRENT
 ($1mk/cm^2 = 2.9$ e.f.c. = $2.9ft$ lambert)