## GENERAL

The 31C12 is an electrostatically focused and magnetically deflected cathode-ray tube intended for use in Radio DF Compass equipment. The tube is aluminised, has a 6" diameter flat face, and is available with a "T2" screen which gives a blue-green trace of long persistence.

## **RATINGS**

Heater voltage	$V_{h}$	6.3	٧
Heater current	l <sub>h</sub>	0.6	Α
Maximum first and third anode voltage	$V_{a1,a3(max)}$	14*	kV
Minimum first and third anode voltage	V <sub>a1,a3(min)</sub>	10	kV
Maximum second anode voltage	$V_{a2(max)}$	<b>±700</b>	V
Maximum heater/cathode voltage, d.c. (heater negative)	V <sub>h-k(max)</sub>	180	٧
Maximum peak heater/cathode voltage, d.c. (heater negative)	Vh-k(pk)max	400†‡	٧

<sup>\* 14</sup>kV is a design centre rating, the absolute rating of 15.5kV must not be exceeded.

## INTER-ELECTRODE CAPACITANCES

Grid/All other electrodes	C <sub>g-all</sub>	5.5	рF
Cathode/All other electrodes	C <sub>k-all</sub>	6.0	pF

These capacitances include an AEI duodecal holder type CRT92/7.

## TYPICAL OPERATION

First and third a	node voltage	V <sub>a1.a3</sub>	12	kV
Second anode vo	oltage for focus (range)	V <sub>a2</sub>	-100 to $+300$	٧
Grid bias voltag	e for cut-off of raster	Vg	-30 to <b>-72</b>	V
	to peak modulating voltage n of limit cathode-ray tube up to 50 $\mu$ A	,	25	٧

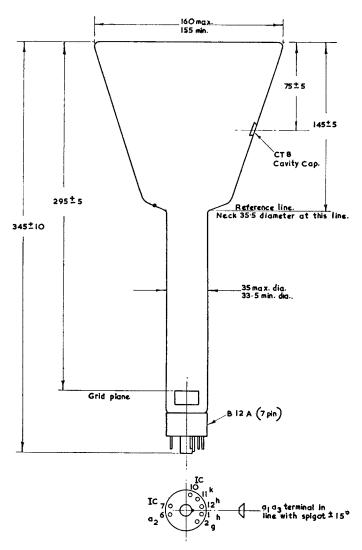
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<sup>†</sup> Absolute rating.

<sup>‡</sup> During a warming-up period not exceeding 1 minute.





All dimensions in millimetres. Not to be scaled.