Thyratron *Type FX 215*

General. The FX 215 is a hydrogen-filled thyratron designed for pulse applications, where high peak emission and high peak forward and inverse anode voltages are required. Due to the absence of condensable vapour, it is not necessary to provide thermostatic control of the bulb temperature by the use of an air-blast, and, for the same reason, the valve may be operated over a wide range of ambient air temperatures without any appreciable change in the characteristics. The use of a hydrogen filling permits the passage of high pulse currents at high arc-drop voltages without the risk of cathode disintegration.

Mounting. The valve may be mounted in any position but should be clamped by the base only. It should on no account be operated in the vicinity of strong fields which could ionise the gas filling.

APPROXIMATE DATA

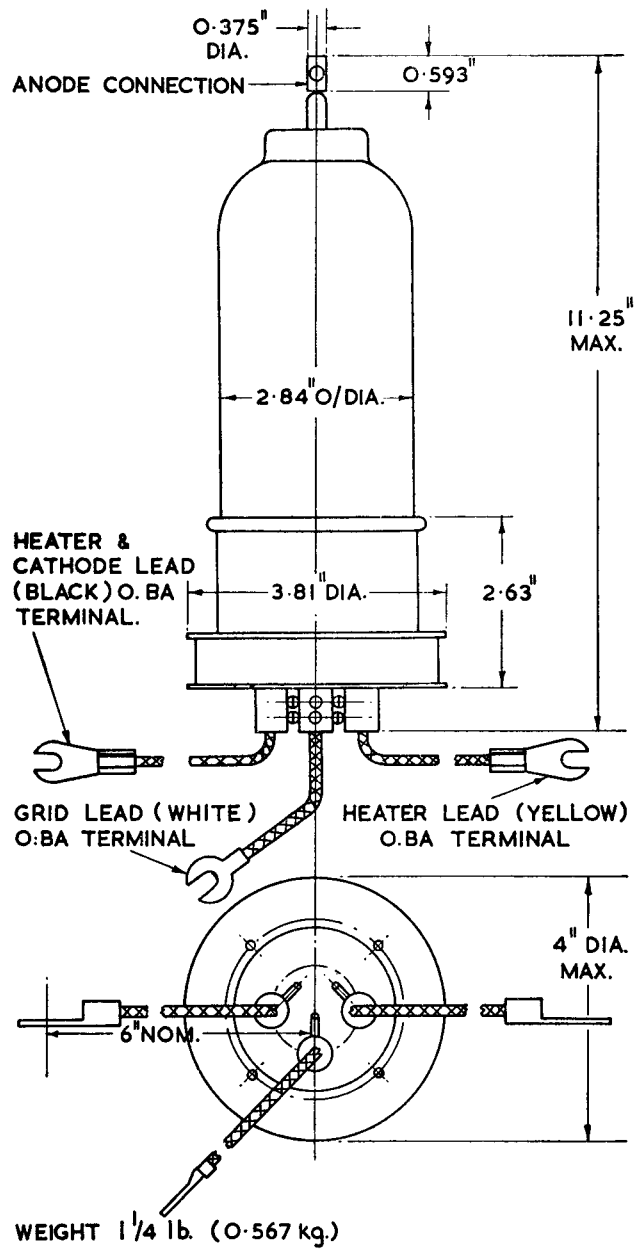
V_f	2·5 (±5%)	V
I_f	27·5	A
$V_{a(pk)\ (max)}$ (b)	16	kV
$I_{a(pk)\ (max)}$	200	A
$V_{p(min)}$ (trigger) (c)	150	V
$I_{a(max)}$	200	mA
V_{g1}	−60±10	V
$Z_{dr(max)}$	500	Ω
Duty cycle (max)	0·001	
Pre-heating time (min)	2	mins
T_{amb}	−50+90	°C

NOTES

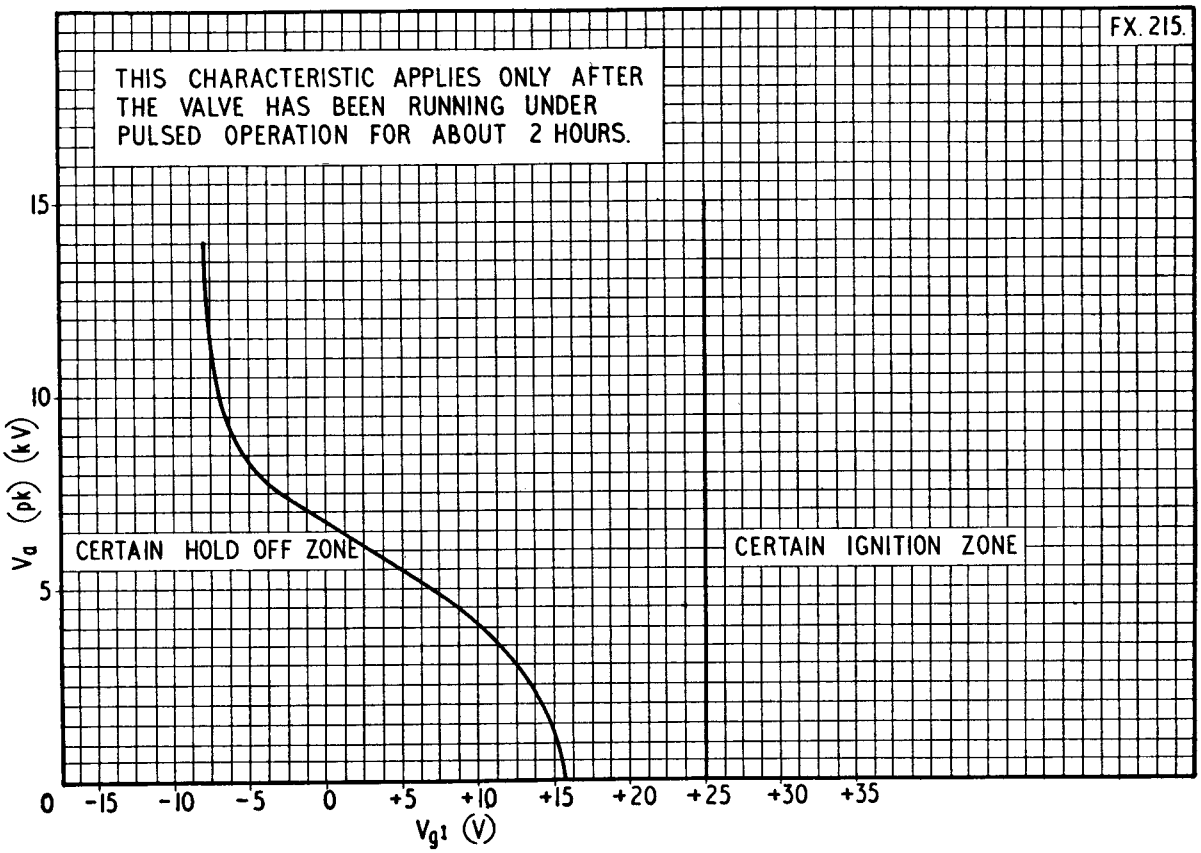
(a) (1) Repetition frequency, 500 pulses per second.
(2) Pulse length, 0·6, 1·4 or 2·0 μs.
(3) Pulse shape, sensibly square.
(4) Preferred load impedance of 37·5 Ω.
(5) Rate of rise of current, 600 A per μs.

(b) In pulsed operation the peak inverse voltage exclusive of a spike of 0·05 μs duration, shall not exceed 5 kV during the first 25 μs after the pulse.

(c) Grid pulse duration 2 μs (min.). Rise time 0·5 μs (max.).



MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED
Head Office: Marconi House, Chelmsford, England. Telephone: Chelmsford 3221. *Telegraphic Address: Expanse, Chelmsford*



PRINTED IN ENGLAND