Thyratron *Type AFX203*

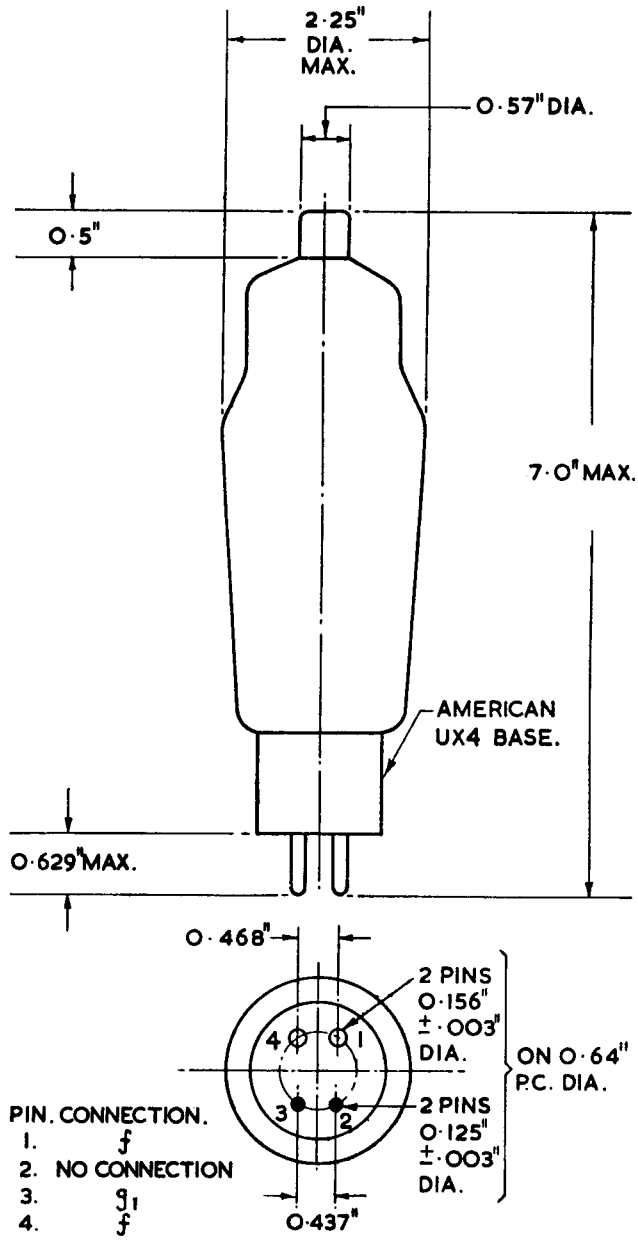
General. The AFX 203 is a directly-heated triode thyratron mounted in a glass envelope and fitted with a UX4 base. It is filled with Xenon and has, in consequence, characteristics which are little affected by changes in ambient temperature. It is, therefore, suitable for operation over a wide range of ambient temperatures.

A high filament efficiency is obtained by the use of heat shields. Control of the arc discharge path is ensured by the use of a grid structure which adequately screens the cathode from the anode. Owing to the absence of condensable vapour, only a very short period of pre-heating is necessary before the valve is put into operation.

The thyratron's characteristics are shown graphically in the form of control ratio curves (curves which relate the anode voltage to the grid voltage at which ignition just occurs). Since the control ratio varies appreciably from valve to valve, the characteristic curve is given in the form of a cross-hatched area within which the control ratio curves will lie. To the left of this area ignition cannot take place, while to the right of it ignition is certain. A typical individual curve is shown within this area. The abscissae represent DC grid voltages, and the ordinates the peak anode voltages (forward and inverse) for a sinusoidal anode voltage supply.

APPROXIMATE DATA

V_f	2·5	V	$I_{a\ (av)\ max.}$	0·64	A
I_f	4	A	V_{arc} at $I_{a\ (av)}$	0·4 A 11	V
PIV	300	V	T_{ext}	−40 to +65°C	
PFV	280	V	t_{hk}	20	sec.
$I_{a\ (pk)\ (max)}$	1·7	A	$c_{a\text{-}gl}$	1	pF
$I_{a\ (av)}$	0·4	A	$c_{gl\text{-}k}$	10·4	pF



WEIGHT 0·25 lb. (0·1 kg.)

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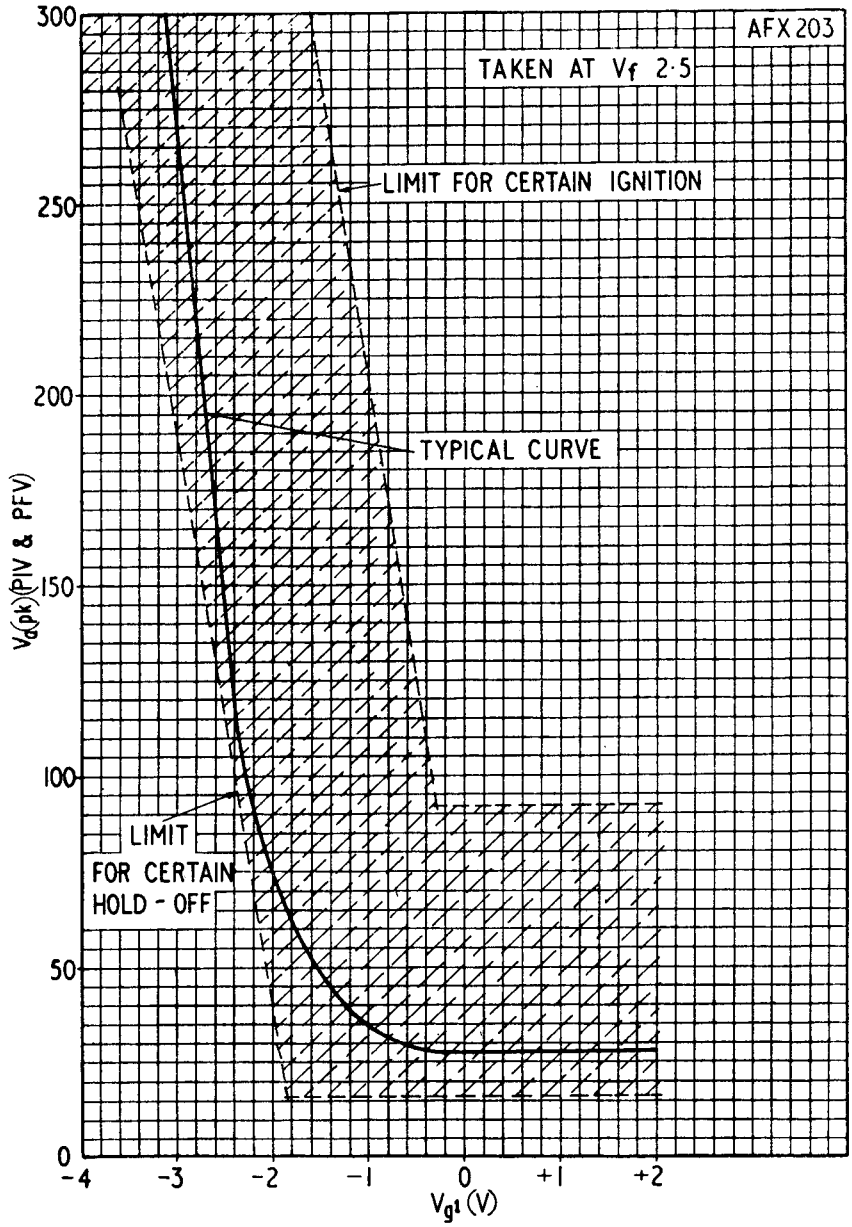

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