



Rectifier Type GXU 1

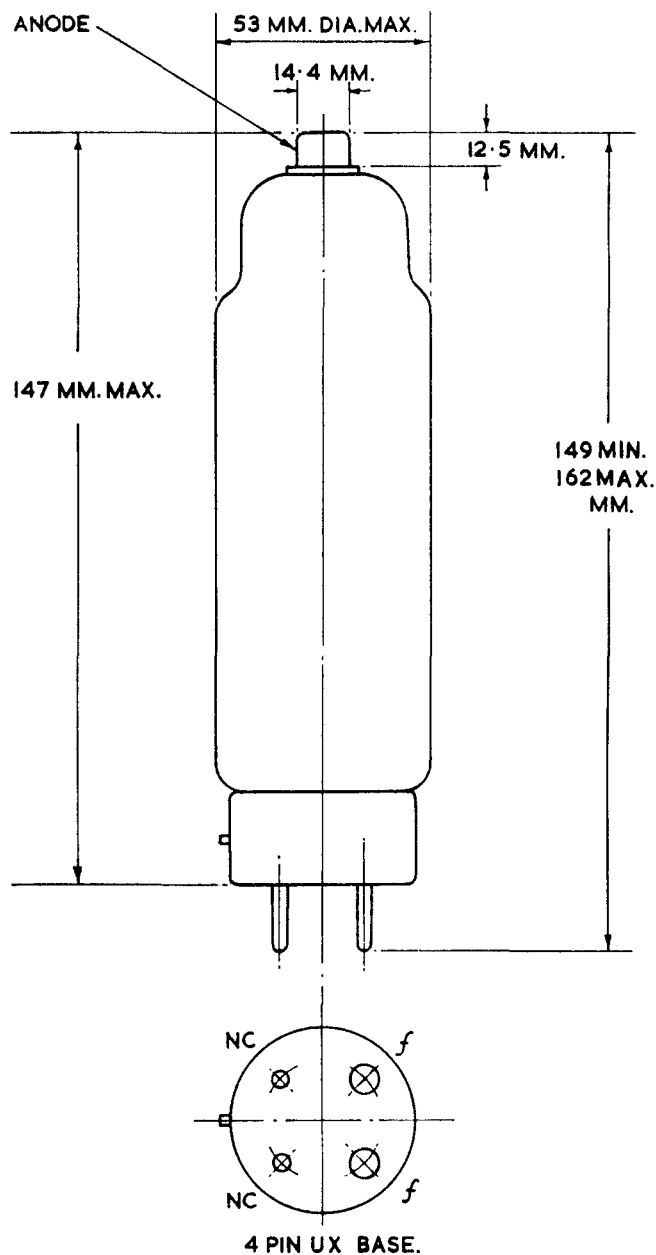
General. The GXU 1 is a xenon filled half-wave rectifier mounted on a 4-pin UX base and with characteristics as given below.

APPROXIMATE DATA

V_f		2.5	V
I_f		5.0	A
$PIV_{(max)}$	10,000	5,000	V
$I_{a(pk)(max)}$	1.0	2.0	A
$I_{a(max)} (a)$	0.25	0.5	A
$f_{(max)}$	150	500	c/s
$I_{surge(pk)(max)} (b)$	20	20	A
T_{amb}	-55/+75	-55/+75	°C
$V_{a-f} (I_a=0.5A)$		12	V
$t_{hk(min)}$		10	secs

NOTES

- (a) Maximum time of averaging 15 sec.
 (b) Maximum surge duration 0.1 sec.



MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED

Head Office: Marconi House, Chelmsford, England. Telephone: Chelmsford 3221. Telegraphic Address: Expanse, Chelmsford

OPERATING CONDITIONS (Full Load)

Circuit	No. of valves	PIV	Full load DC Output		Applied AC voltage (V r.m.s.)
			(V)	(A)	
Single-phase full-wave	2	$\begin{cases} 10,000 \\ 5,000 \end{cases}$	3,200 1,600	0.5 1.0	3,500 per valve 1,800 per valve
Single-phase bridge	4	$\begin{cases} 10,000 \\ 5,000 \end{cases}$	6,400 3,200	0.5 1.0	7,100 total 3,500 total
→ Three-phase half-wave	3	$\begin{cases} 10,000 \\ 5,000 \end{cases}$	4,800 2,400	0.75 1.5	4,100 per phase 2,050 per phase
→ Three-phase full-wave	6	$\begin{cases} 10,000 \\ 5,000 \end{cases}$	9,600 4,800	0.75 1.5	4,100 per phase 2,050 per phase

Circuit Notes

When quadrature operation is used, the filament voltage (pin 1 with respect to pin 4) should be crossing zero from positive towards negative when the anode voltage is at the peak of the positive half cycle.

When quadrature operation is not practicable, filament pin 1 should be positive when the anode voltage is positive.