Mercury-vapour Rectifiers

used in power supply of transmitting and industrial equipment

Cathode, Heating

Directly heated, oxide-coated filament

V_f	=	5	V ± 5%
I_f	=	12	A
t_h[1]	=	min. 90	s

Characteristics

V_{arc}[2]	=	12	V

Maximum Ratings

f	=	150	150	150	Hz
$-V_{a\,p}$	=	21	15	10	kV
I_a[3]	=	2.5	2.5	2.5	A
$I_{a\,p}$	=	10	10	10	A
I_{surge}[4]	=	100	100	100	A
T_{Hg}	=	25 . . . 45	25 . . . 50	25 . . . 60	°C
T_{amb}	=	15 . . . 30	15 . . . 35	15 . . . 45	°C

Operating Characteristics[5]

Circuit	$V_{tr\,rms}$ (kV)	V_o (kV)	I_o (A)	P_o (kW)
$-V_{a\,p}$ = 21 kV				
a	14.8	6.7	2.5	17
b	7.4	6.7	5.0	33
c	14.8	13.4	5.0	67
d	8.7	10.0	7.5	75
e	8.7	20.0	7.5	150
f	8.7	10.0	15.0	150
g	7.4	9.6	10.0	96
h	7.4	19.0	10.0	190
i	7.4	10.0	10.0	100
k	7.4	10.4	10.0	104

[1] after transport and after a long interruption of service t_h = min. 3600 s should be observed
[2] at I_a = 2.5 A
[3] t_{av} = max. 30 s
[4] t = max. 0.1 s
[5] for circuit figures refer to Typical Rectifier Circuits section

Mounting Position

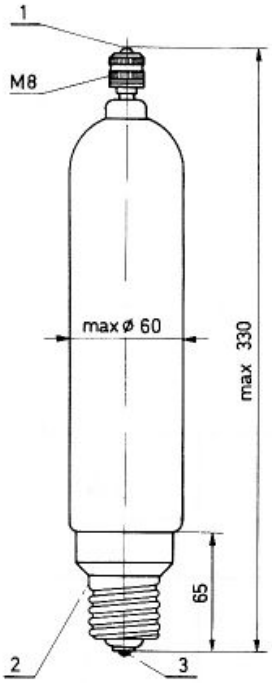
Vertical, base down

Mass

500 g

9Q205

Dimensions in mm



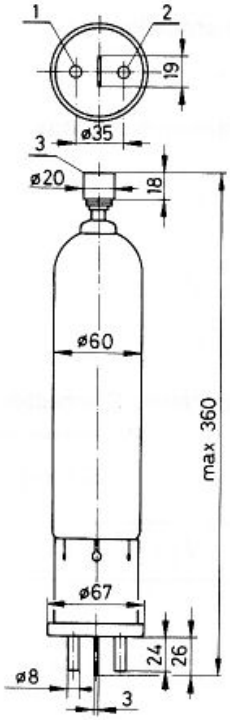
Terminals

Base: E40

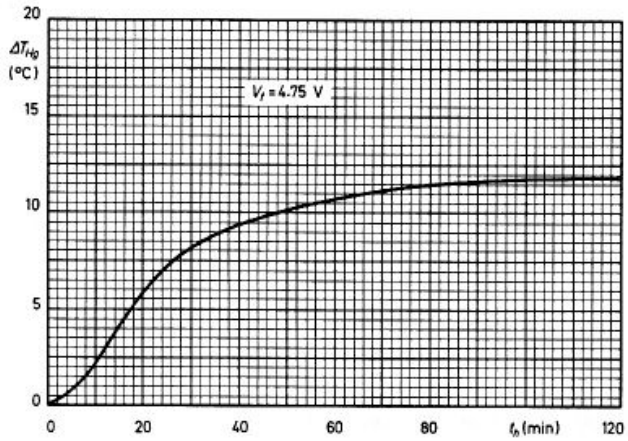
1 – a
2 – f
3 – f

6508 (9Q205-1)

Dimensions in mm



Terminals

Base: A3–20

1 – f
2 – f
3 – a