

February 25, 1948

WESTINGHOUSEX-RAY TUBE DATA SHEETElectron Tube Type 5539GENERAL

Electrical Data

Filament Current Range

3.5 to 5.5

Amperes

Filament Voltage Range

3.5 to 10

Volts

Mechanical Data

Type of Cooling

Air

Focal Spot Size

Projected length

2.1 and 4.2

mm

Width

2.1 and 4.2

mm

Base Description

Special 3-pin

Maximum Overall Dimensions

15-23/32 x 3-13/16

Inches

Outline Drawing Number

5539

Mounting Position

AnyMAXIMUM RATINGS

Heat Capacity

270,000

*Heat units

Continuous Rating

15,000

Heat units

per minute

Maximum Fluoroscopic Rating at a Loading
of 425 (KV x MA)**20

Minutes

	<u>Full Wave</u>	<u>Half Wave</u>	<u>Self-rectified</u> <u>Inverse Useful</u>	<u>Units</u>
Peak plate voltage	100	100	100 90	Kilovolts
Value of D-C average current at maximum voltage rating	68	45	- 34	Milliamps.
Allowable time of operation under above conditions	1/20	1/20	- 1/20	Second

Table of short-time ratings which are given as the product of peak kv useful times
D-C average milliamperes.

	<u>2.1 mm spot sizes</u>			<u>4.2 mm spot sizes</u>		
<u>Time</u>	<u>Full Wave</u>	<u>Half Wave</u>	<u>Self-rectified</u>	<u>Full Wave</u>	<u>Half Wave</u>	<u>Self-rectified</u>
0.1 Sec.	6200	4225	2940	18250	13000	8700
1 "	4800	3400	2575	11800	9600	6900
5 "	3920	2875	2310	8400	7300	5650
30 "	3020	2250	1970	6000	4600	4000

*Heat units are defined as the product of the peak voltage in kilovolts, D-C average
current in milliamperes, and the exposure time in seconds, and is proportional to energy.

**KV x MA is defined as the product of Peak KV times D-C average MA and is proportional
to power.

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RMA TYPES 5539, 5540

