

WESTINGHOUSE

February 25, 1948

X-RAY TUBE DATA SHEETElectron Tube Type 5540GENERALElectrical Data

Filament Current Range
Filament Voltage Range

3.5 to 5.5 Amperes
3.5 to 10 Volts

Mechanical Data

Type of Cooling
Focal Spot Size
Projected length
Width
Base Description
Maximum Overall Dimensions
Outline Drawing Number
Mounting Position

Air
1.5 and 3.0 mm
1.5 and 3.0 mm
Special 3-pin
15-23/32 x 3-13/16 Inches
5540
Any

MAXIMUM RATINGS

Heat Capacity
Continuous Rating

270,000 *Heat units
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</u>	<u>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	Milliamperes
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>1.5 mm spot size</u>			<u>3.0 mm spot size</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.	3500	2600	1700	10800	7400	4950
1 Sec.	2800	2000	1520	7600	5900	4150
5 Sec.	2300	1800	1400	5900	4800	3600
30 Sec.	1700	1500	1250	4450	3640	2950

*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

