

WESTINGHOUSE

X-RAY TUBE DATA SHEET

Electron Tube Type 5519

GENERAL

Electrical Data

Filament Current Range	<u>3.5 to 5.5</u>	Amperes
Filament Voltage Range	<u>3.5 to 10</u>	Volts

Mechanical Data

Type of Cooling	<u>Oil</u>	
Focal Spot Size (Double Focus)		
Projected Length	<u>2.1 and 4.2</u>	mm
Width	<u>2.1 and 4.2</u>	mm
Base Description	<u>None</u>	
Maximum Overall Dimensions	<u>8-3/16 x 2-7/16</u>	Inches
Outline Drawing Number	<u>60011</u>	
Mounting Position	<u>Any</u>	

MAXIMUM RATINGS

Heat Capacity	<u>100,000</u>	*Heat Units
Continuous Rating	<u>30,000</u>	Heat Units Per Minute

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

Continuous to Heat  
Capacity of Head

	Spot Size	Full Wave	Half Wave	Self-Rectified		Units
				Inverse	Useful	
Peak Plate Voltage	Both	110	100	100	90	Kilovolts
Value of d.c. Avg. Current at Maximum Voltage Rating	2.1 4.2	50 169	44 139	- -	34 103	Milliamps. Milliamps.
Allowable Time of Operation Under Above Conditions	Both	1/20	1/20	-	1/20	Second

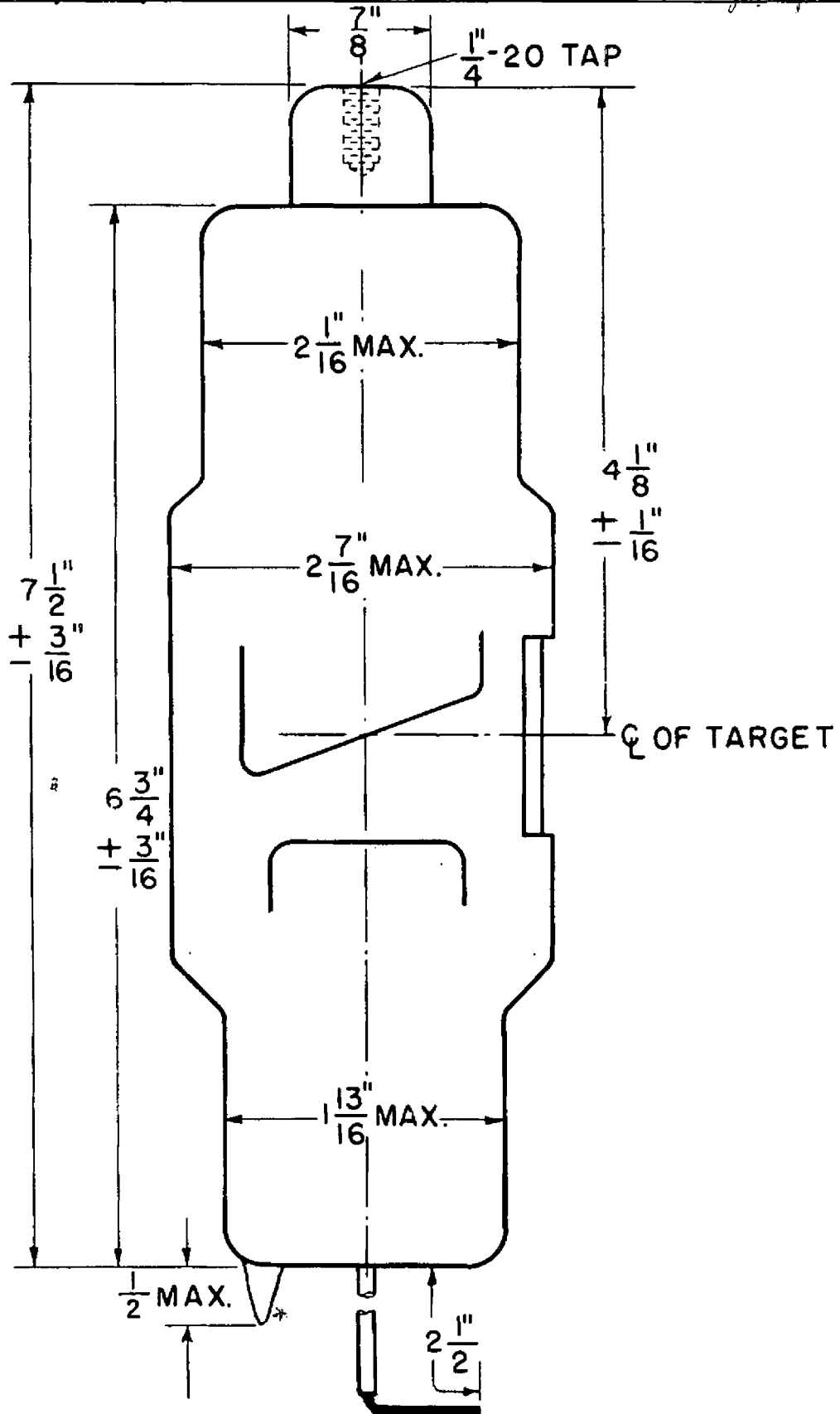
Table of short-time ratings which are given as the product of peak KV useful times  
D-C average milliamperes.

Time	2.1 mm. Spot Size			4.2 mm. Spot Size		
	#Full Wave	Half Wave	Self-Rectified	#Full Wave	Half Wave	Self-Rectified
0.1 Sec.	6100	4200	2950	18250	13000	8700
1 "	4800	3375	2560	11800	9600	6900
5 "	3900	2880	2300	8100	7300	5650
30 "	2800	2150	1900	3400	3400	3400

\*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.

# Ratings are for 100 KV peak plate voltage.



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