

DESCRIPTION AND RATING

KENOTRON 5973

The 5973 is a two-electrode high-vacuum tube designed for use as a rectifier or surge-limiting diode. The anode is radiation-cooled and capable of dissipating 850 watts. The cathode is a thoriated-tungsten filament.

TECHNICAL INFORMATION

GENERAL

<u>Electrical Data</u>	<u>Minimum</u>	<u>Bogey</u>	<u>Maximum</u>	
Filament Voltage	15.2	16	16.8	Volts
Filament Current	18.0	19.1	20.2	Amperes
Filament Starting Current			30	Amperes
Filament Cold Resistance		0.1		Ohm
Filament Heating Time (before applying plate voltage)	30			Seconds
Tube Voltage Drop, $I_b = 5$ Amperes	850	950	1050	Volts
Interelectrode Capacitance		14		uuf

Mechanical Data

Mounting Position - Vertical, Cathode Base Down

Maximum Glass Temperature*	300	C
Maximum Base Temperature	150	C
Net Weight, approximate	3	Pounds

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

Rectifier Service

Maximum Ratings, Absolute Values

Peak Inverse Voltage	75	Kilovolts
Plate Current		
Peak	5	Amperes
Average		
Peak Inverse Voltage = 40 Kilovolts or Less	1.25	Amperes
Peak Inverse Voltage = More than 40 Kilovolts	1.00	Ampere
Average Plate Dissipation**	850	Watts

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS (CONT'D)

Limiter Service

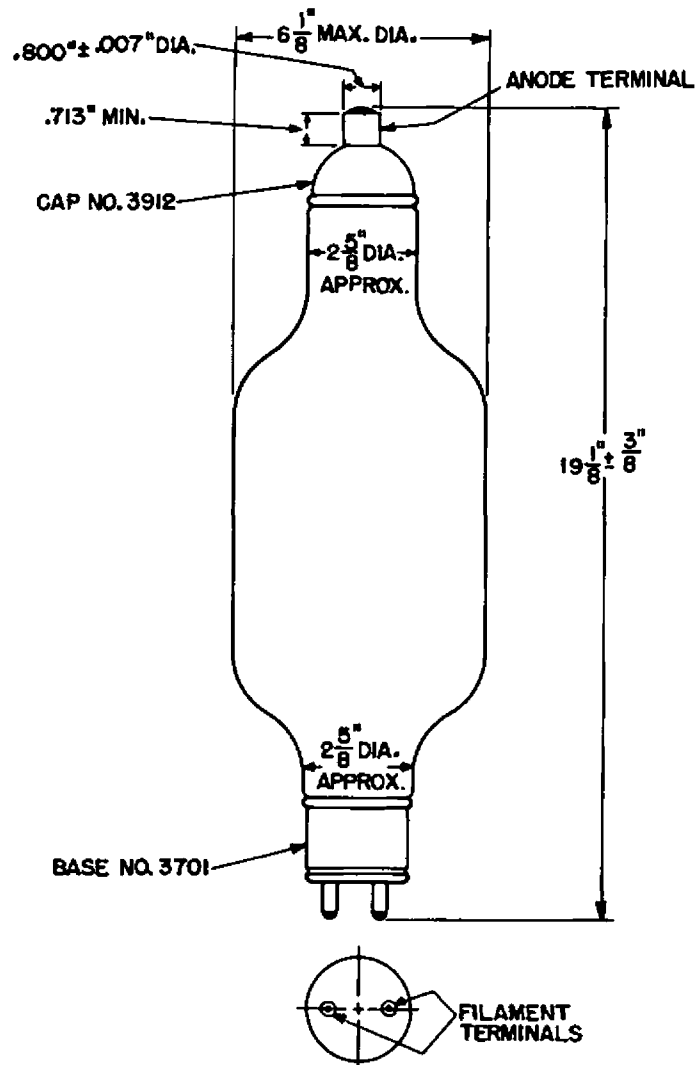
Maximum Ratings, Absolute Values

Peak Inverse Voltage	75 Kilovolts
Peak Forward Voltage	20 Kilovolts
Peak Plate Current, minimum	10 Amperes

Average Plate Dissipation**	850 Watts
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* Where tubes are enclosed or operated in close proximity to each other, forced-air cooling may be required to limit bulb and base temperatures to the allowable maximum.

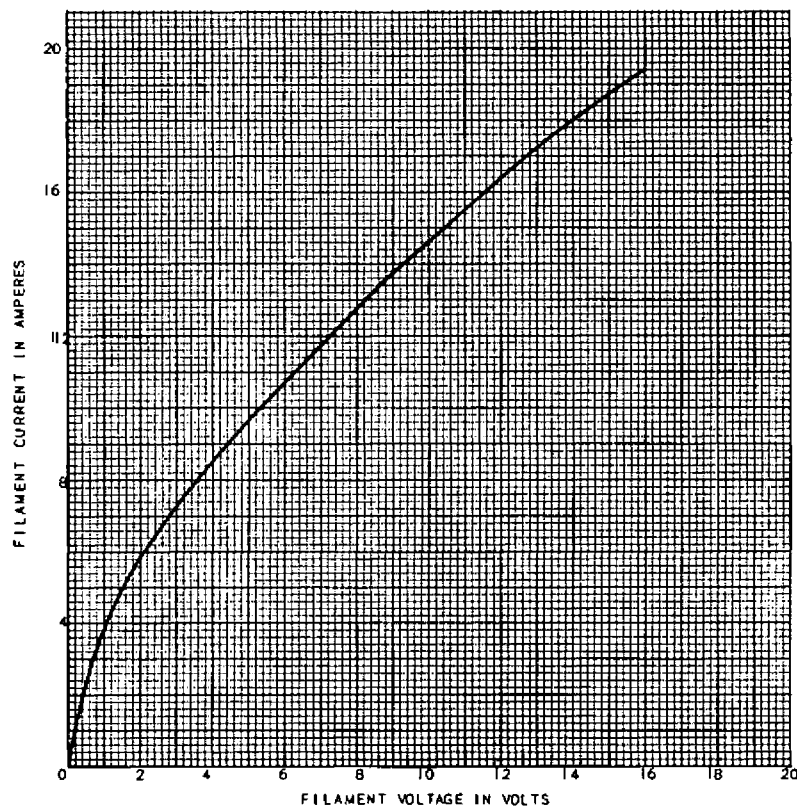
** Maximum observed temperature of 1010 C at any point on the anode.



N21009AZ

Outline
5973

June 21, 1950

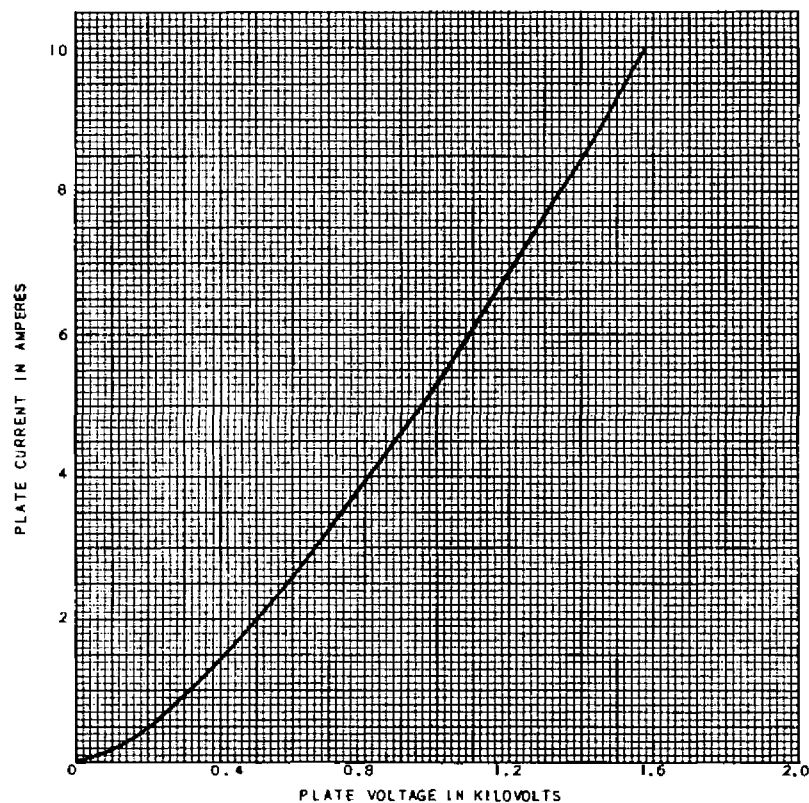


K-69087-72A380

May 24, 1950

5973

Typical Filament-Current Characteristic



K-69087-72A381

May 24, 1950

5973

Typical Plate Characteristic

$E_f = 16$ Volts

GENERAL  ELECTRIC
ELECTRONICS DEPARTMENT, TUBE DIVISIONS
SCHENECTADY, NEW YORK