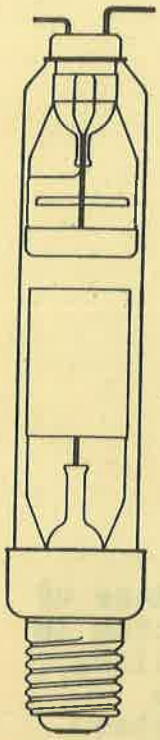
NAVY TYPE: CEL 1552

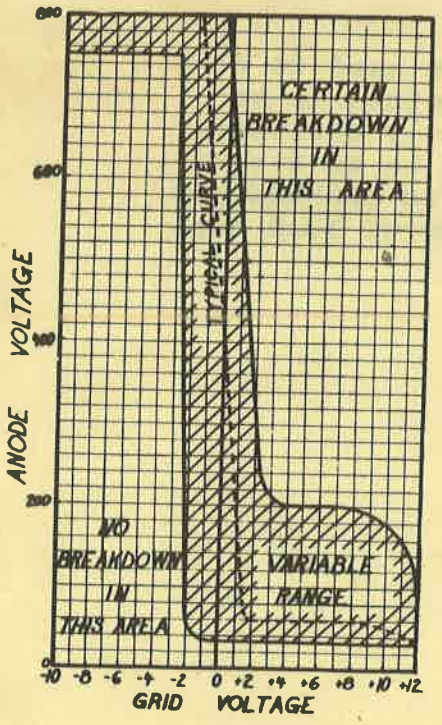
GRID-CONTROL RECTIFIER TUBE

EL C5B



Tantalum Anode and Xenon Gas Filling

D-c. Amperes Output (Max. Rated)	
D-c. Meter Value-Continuous	5
D-c. Meter Value-Overload less than 3 sec.	10
Oscillograph Peak-Continuously recurring	75
Peak Forward Volts (Max. Instantaneous)	750
Peak Inverse Volts (Max. Instantaneous)	1500
Nominal A-c. Volts per Anode	110-440
Average Arc Drop Volts	
Highest Tube	12
Average Tube	9
Filament	
Volts	2.5
Amperes	23±3
Heating Time	Approx. 1 min.
Grid Characteristics	
Critical Grid Volts @ p.f.v.	-1.5±1.5
Critical Grid Current	Below 10 Microamps
Maximum Negative Grid Volts	100
Starting Volts (Instantaneous)	
Highest Tube	200
Average Tube	50
Maximum De-ionization Time	Approx. 1 Millisecond
Grid-anode Capacity	Approx. 10 uuf
Grid-filament Capacity	Approx. 10 uuf
Max. A-c. Short-circuit Current (0.1 sec.)	600A
Overall Dimensions	2¼ x 11½±½"
Weight	12.5 Ozs.
Connections	
Filament	Mogul Screw Socket
Anode & Grid	Pins at top for clip connection
Ambient Temperature Limits	-40 to +65°c.



The filament must be lit before the d-c. load is applied.

All of the above values are for returns to the filament center tap.

ELECTRONS, INC.
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4/17/44

Type CEL 1552 may be used in place of a half-wave rectifier tube of similar rating in the usual rectifier circuits. By controlling initiation of the arc with the grid it is possible to adjust the average or d-c. meter reading of the output of the rectifier from zero to the value it would have if half-wave rectifier tubes were used.

The type CEL 1552 may be used to control the speed of a motor. One method is to connect the armature of a separately excited d-c. shunt motor through the tube to an a-c. line. Voltage applied from grid to cathode may then be used to determine the flow of load current to the motor.