

ELC6J is a directly heated xenon-filled grid-controlled rectifier thyatron for heavy industrial power control. Its tantalum-anode construction and massive filament support substantial controlled gas-discharge current.

GENERAL CHARACTERISTICS

BASE DESIGNATION	A4-81	BASE PINS	4
NOMINAL HEATER	2.5 V / 21 A	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Thyatron	
MAXIMUM CATHODE CURRENT	6.4 A
PEAK INVERSE VOLTAGE	1250 V
NOMINAL OUTPUT CURRENT	6.4 A
PEAK FORWARD CURRENT	77 A
FORWARD VOLTAGE DROP	9 V
Grid-controlled xenon rectifier (thyatron).	

ELC6J is a grid-control xenon rectifier tube using tantalum anode and xenon gas filling. The datasheet publishes filament, anode-current, inverse-voltage, arc-drop and operating ratings.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1942 Electronics Inc

Published test conditions and operating points. Values on this page are preserved as reported by this source.

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Section 1 · Thyatron

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
D-c. Meter Value - Continuous	6.4 A	—
Oscillograph Peak - Continuously Recurring	77 A	—
Peak Inverse Voltage	1250 V	—
Filament Voltage	2.5 V	—
Filament Current	21 A	—
Peak Forward Voltage	750 V	—
Heating Time Minimum	60 s	—
Maximum Negative Grid Voltage	100 V	—
Maximum Short Circuit Current	770 A	—
Maximum Commutation Factor	0.66 V/us x A/us	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Average Arc Drop	9 V	—
Grid-Anode Capacitance	4 pF	—
Grid-Filament Capacitance	21 pF	—



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OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Continuous DC anode current	6.4 A	—
Overload anode current	12.8 A	LessThan3Seconds
Continuously recurring peak anode current	77 A	—
Peak inverse voltage	1250 V	—
Peak forward voltage	750 V	—
Maximum negative grid voltage	100 V	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Gas filling	Xenon	—
Anode material	Tantalum	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-anode capacitance	4 pF	—
Grid-filament capacitance	21 pF	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Critical grid current maximum	10 uA	—
Deionization time maximum	1000 us	—
Filament current tolerance	1 A	—

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

