

ELECTRONIC TUBE REFERENCE

C3JL

Specialized - Thyatron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
THYRATRON

Long-envelope directly heated xenon negative-control thyatron with mid-tapped filament for high-voltage, high-current grid-controlled rectifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	2.5 V / 9 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Thyatron	
MAXIMUM PLATE VOLTAGE	900 V
MAXIMUM CATHODE CURRENT	30 A
Published ratings and characteristics promoted from approved datasheet.	

RCA C3JL is a directly heated xenon negative-control thyatron with a mid-tapped filament and high-voltage/high-current grid-controlled rectifier ratings.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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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
Filament voltage	2.5 V	Nominal
Filament current	9 A	Nominal
Maximum deionization time	1000 us	—
Maximum critical grid current	10 uA	—
Maximum commutation factor	0.66 VA/us ²	—
Peak forward anode voltage	900 V	—
Peak inverse anode voltage	1250 V	—
Peak negative grid voltage before conduction	100 V	—
Peak negative grid voltage during conduction	10 V	—
Peak anode/cathode current	30 A	—
Average anode/cathode current	2.5 A	—
Fault current	300 A	Short-duration fault rating
Ambient or condensed-mercury operating temperature range	-55 to +75 C	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Minimum heating time prior to tube conduction	30 s	—
Ionization time	10 us	Approximate
Anode voltage drop	10 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-anode capacitance	2 pF	Approximate

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