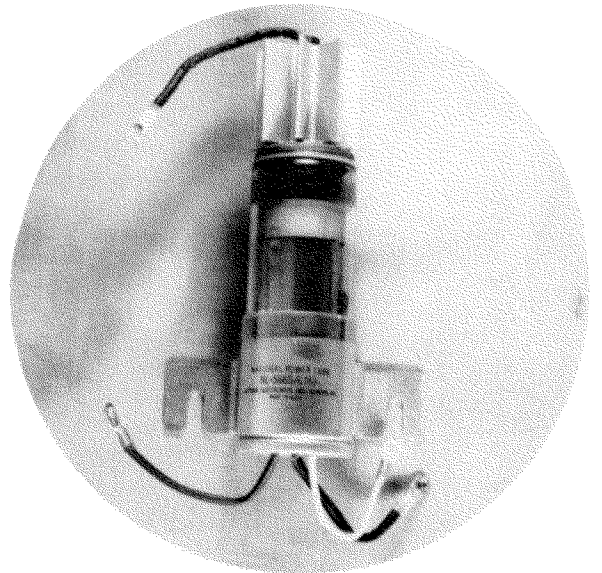


# NL-5665/C16J THYRATRON TUBE

**18 Amperes dc -- 160 Ampere peak  
1250 Volts peak**

**National Power Tube NL-5665/C16J** is a compact, quick heating thyatron designed for motor speed control and welding control applications. It is xenon filled for quick starting and the ability to operate within very wide temperature limits.



## TECHNICAL INFORMATION

dc Amperes output (Maximum) .....	18	16
Instantaneous amperes output (Maximum) .....	100	160
Maximum time of averaging anode current (seconds) .....	4.5	
Maximum peak inverse volts .....	1250	
Maximum peak forward volts .....	1000	
Max. commutation factor (V/usec. x A/usec.) at max. initial inverse voltage of 330 volts .....	0.66	
Filament volts .....	2.5	
Filament amperes .....	31 ± 3	
Filament heating time (seconds) .....	60	
Typical arc drop at 50 amperes peak (volts) .....	12	
Grid control characteristic .....	See Curve	
Maximum negative grid voltage before conduction (volts) .....	100	
Maximum negative grid voltage during conduction (volts) .....	10	
Maximum critical grid current (microamps) .....	10	
Ionization time (approx., microseconds) .....	10	
Deionization time (approx. microseconds) .....	1000	
Anode to grid capacitance (uuf) (approx.) .....	8	
Maximum ac short circuit current (amperes) .....	1000	
Ambient temperature limits (°C) .....	-55 to +75	
Mounting position .....	Vertical	
Net weight (ounces) .....	32	
Approx. shipping weight (lbs.) .....	3½	

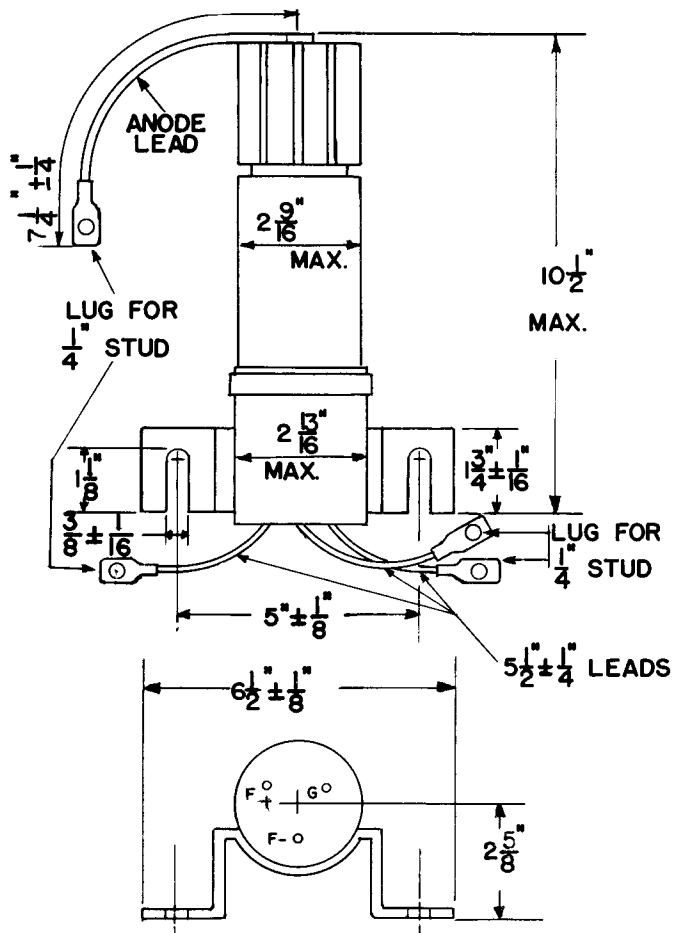
ALL DATA ARE BASED ON RETURNS TO FILAMENT TRANSFORMER CENTER TAP. Filament lead F— should be negative with respect to F+ during conduction period.

LIGHT FILAMENT BEFORE APPLYING LOAD.

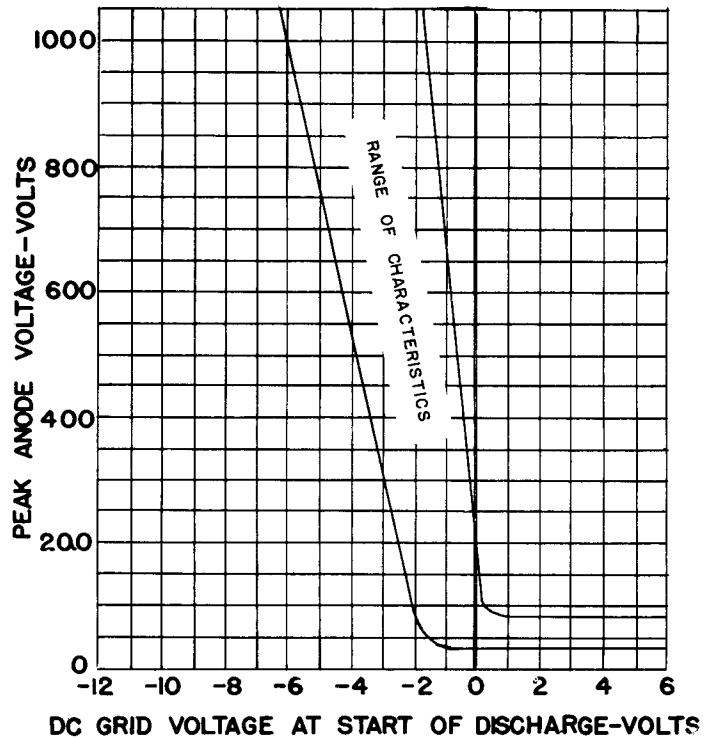
Printed in USA 8-57 GR

**NATIONAL ELECTRONICS, INC.**  
GENEVA, ILLINOIS, U. S. A.

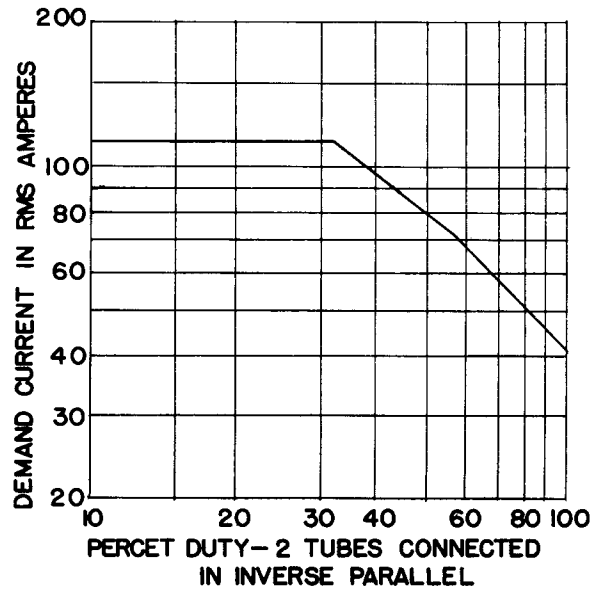
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GRID CHARACTERISTIC



WELDER RATING



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