

CENTRAL ELECTRONIC MANUFACTURERS
2 RICHWOOD PLACE
DENVER, NEW JERSEY

TECHNICAL SPECIFICATIONS FOR TYPE XD-64R HIGH VOLTAGE, HIGH VACUUM DIODE

The Nucor XD-64R is a forced-air cooled high vacuum tube diode specifically designed for rectifier, charging and shunt diode service up to 80KV peak inverse voltage. The tube design features a special thoriated tungsten filament capable of high peak currents and long life. The external anode allows for high anode dissipation ratings and efficient air cooling when used with the recommended Nucor air socket. This air socket permits maximum air flow at the anode. The XD-64R can dissipate 3KW continuously at an air flow of 190 cfm.

SPECIFICATIONS:

PHYSICAL

Overall Length (max) 11 3/4 in.
 Overall Diameter (max) 4 21/32 in.
 Weight (approx) 8 1/2 lbs.
 Mounting Position Vertical
 Mounting Socket
 Type of Cooling Forced Air
 Air Flow

Velocity (cfm)	Anode Dissipation	Pressure Drop (in. of water)
50	1.0 KW	0.20
75	1.8 KW	0.26
125	2.4 KW	0.58
190	3.0 KW	1.21

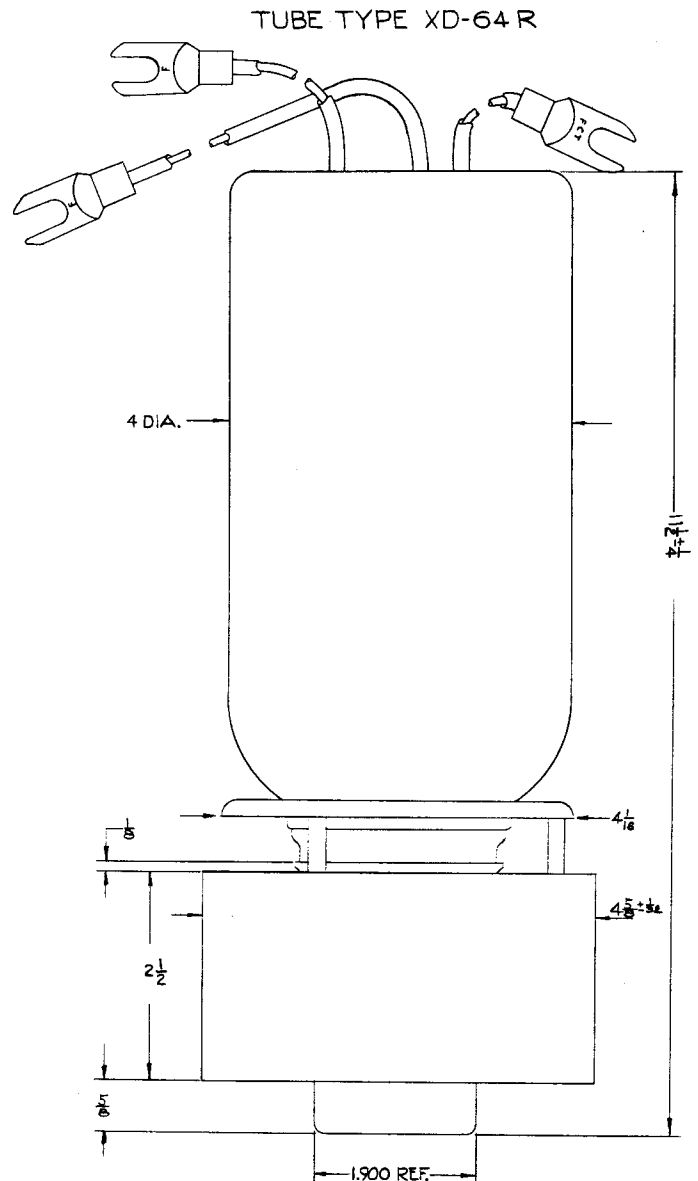
Maximum Incoming Air Temp. 45°C
 Maximum Glass Seal Temp. 180°C

ELECTRICAL (Rectifier):

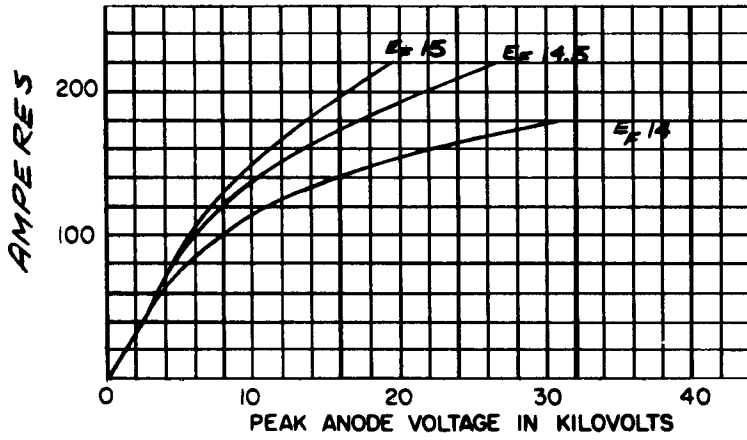
Filament Voltage 13 volts AC
 Filament Current 36 amperes
 Filament Surge Current (max) 80 amperes
 Peak Inverse Voltage (max) 80 kilovolts
 Anode Current 3 amperes
 Peak Anode Current 15 amperes

CLIPPER, SHUNT OR CHARGING DIODE

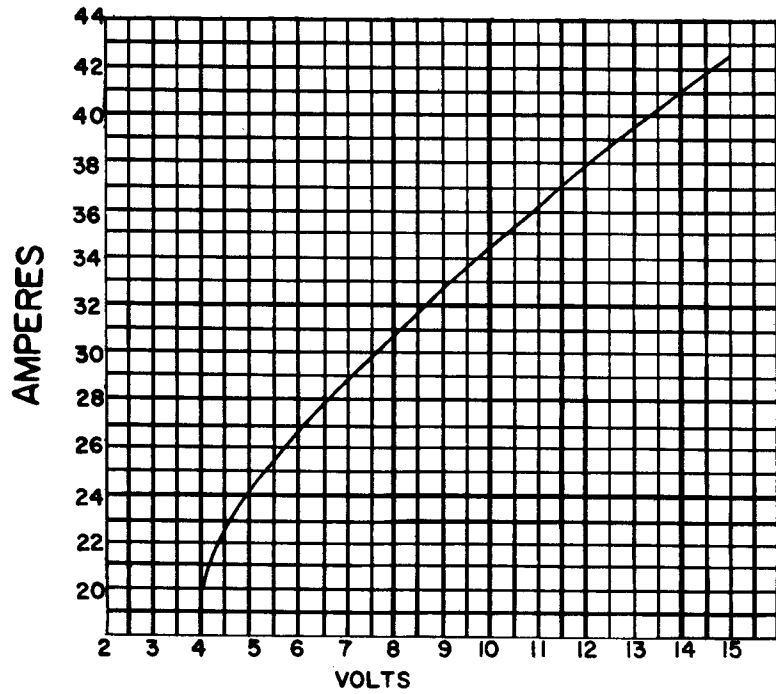
Filament Voltage (clipper) 14.5 volts AC
 Filament Voltage (charging) 13 volts AC
 Filament Current (clipper) 40 amperes
 Filament Current (charging) 30 amperes
 Filament Surge Current (max) 80 amperes
 Peak Inverse Voltage (max) 80 kilovolts
 Anode Current (RMS) 6 amperes
 Peak Anode Current (clipper) 150 amperes



PULSE CHARACTERISTICS



FILAMENT CHARACTERISTICS



AVERAGE ANODE CHARACTERISTICS

