

Central ELECTRONIC

MANUFACTURERS

DENVILLE, NEW JERSEY

HIGH
VACUUM
DIODE

XD - 53

DESCRIPTION

The Central XD-53 is a water cooled high voltage high current diode for use in rectifiers and modulators. The tube features a woven thoriated tungsten filament for greatest protection against shock and vibration.

SPECIFICATIONS:

PHYSICAL

Length	9 7/8 inches
Diameter	4 13/16 inches
Weight	10 pounds
Mounting Position	Vertical
Type of Cooling	Water
Required Water Flow on Anode	

Velocity (gpm)	Anode Dissipation (Kw)	Pressure (psi)
15	30	30

Maximum Outgoing Water Temperature	70°C
Maximum Glass Seal Temperature	180°C

ELECTRICAL

Filament	Thoriated Tungsten
Filament Voltage	10 Volts
Filament Current	120 Amperes
Filament Starting Surge Current	240 Amperes
Filament Cold Resistance	.008 Ohm
Interelectrode Capacitance Anode to Filament	35 uuf
Cathode Warm-up Time	30 Seconds
Average Cathode Current	20 Amperes
Peak Inverse Voltage	40 Kilovolts
Average Anode Current	20 Amperes
Peak Anode Current	60 Amperes

ELECTRICAL (RECTIFIER)

Filament Voltage	10.0 Volts
Filament Current	120 Amperes
Peak Inverse Voltage (max.)	40 Kilovolts
Average Anode Current (max.)	60 Amperes
RMS Anode Current	42.5 Amperes

ELECTRICAL (CLIPPER)

Filament Voltage	10.8 Volts
Filament Current	130 Amperes
Peak Inverse Voltage (max.)	40 Kilovolts
Peak Anode Current (max.)	250 Amperes

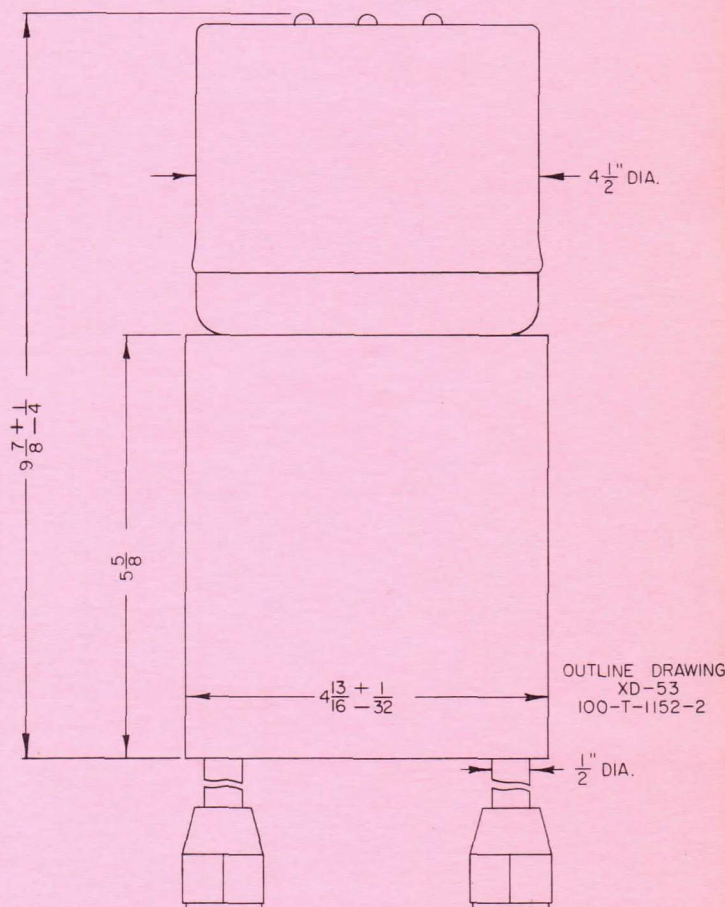
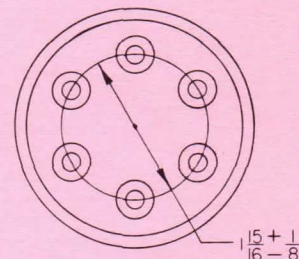
X-RAY INFORMATION

WARNING FOR POSSIBLE X-RAY GENERATION

See Safety Code for the Industrial Use of X-Rays published by the American Standards Association.

Over

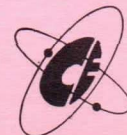
NOTE
ALL PINS ARE
FILAMENT PINS.



PROVISIONAL DATA

Issued 8-60

Check factory before
finalizing designs.



XD-53 PULSE
EMISSION CHARACTERISTIC

