



Electron Devices

L5822 Linear Accelerator Klystron Amplifier

The L5822 is a fixed tuned, S-band, cathode pulsed klystron amplifier that may be used in high energy linear accelerator systems. Peak output power exceeds 5.5 megawatts at 0.1% duty. For a lower price and with a reduced warranty a rebuild of our tube, product number L5822-90, is also available.

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Performance	Mode 1	Mode 2
Frequency.....	2856.....	2856
Peak Output Power (min, MW).....	5.5.....	3.0
Beam Voltage (max, kV).....	127.....	110
Beam Current (max, A).....	92.....	72
Drive Power (max, W).....	200.....	200
Drive Power (min, W).....	55.....	60
Duty (RF, %).....	0.104.....	0.208
Beam Pulse Width (typical, μ s).....	5.8.....	5.8
Beam Pulse Width (max, μ s).....	9.0.....	9.0
Heater Volts (V_{rms}).....	7.5.....	7.5
Heater Current (A_{rms}).....	30 $\pm$ 3.....	30 $\pm$ 3
Ion Pump Voltage (min, kV).....	3.0.....	3.0
Solenoid Voltage (max, Vdc).....	108.....	108
Solenoid Current (Adc).....	35 $\pm$ 1.....	35 $\pm$ 1

Operational Requirements

Coolant, Water

Inlet Temperature	35 $\pm$ 15 $^{\circ}$ C
Body-Collector Flow Rate (min, GPM).....	5.0
Body-Collector Pressure Drop @5 GPM (max, PSI) ..	15.0
Solenoid Flow Rate (min, GPM)	3.0
Solenoid Pressure Drop @ 3 GPM (max, PSI).....	15.0
Oil Bath Temperature (max)	60 $^{\circ}$ C
Waveguide Pressurization Gas	SF ₆ or Freon 12
Waveguide Pressure (PSIG)	35 $\pm$ 10

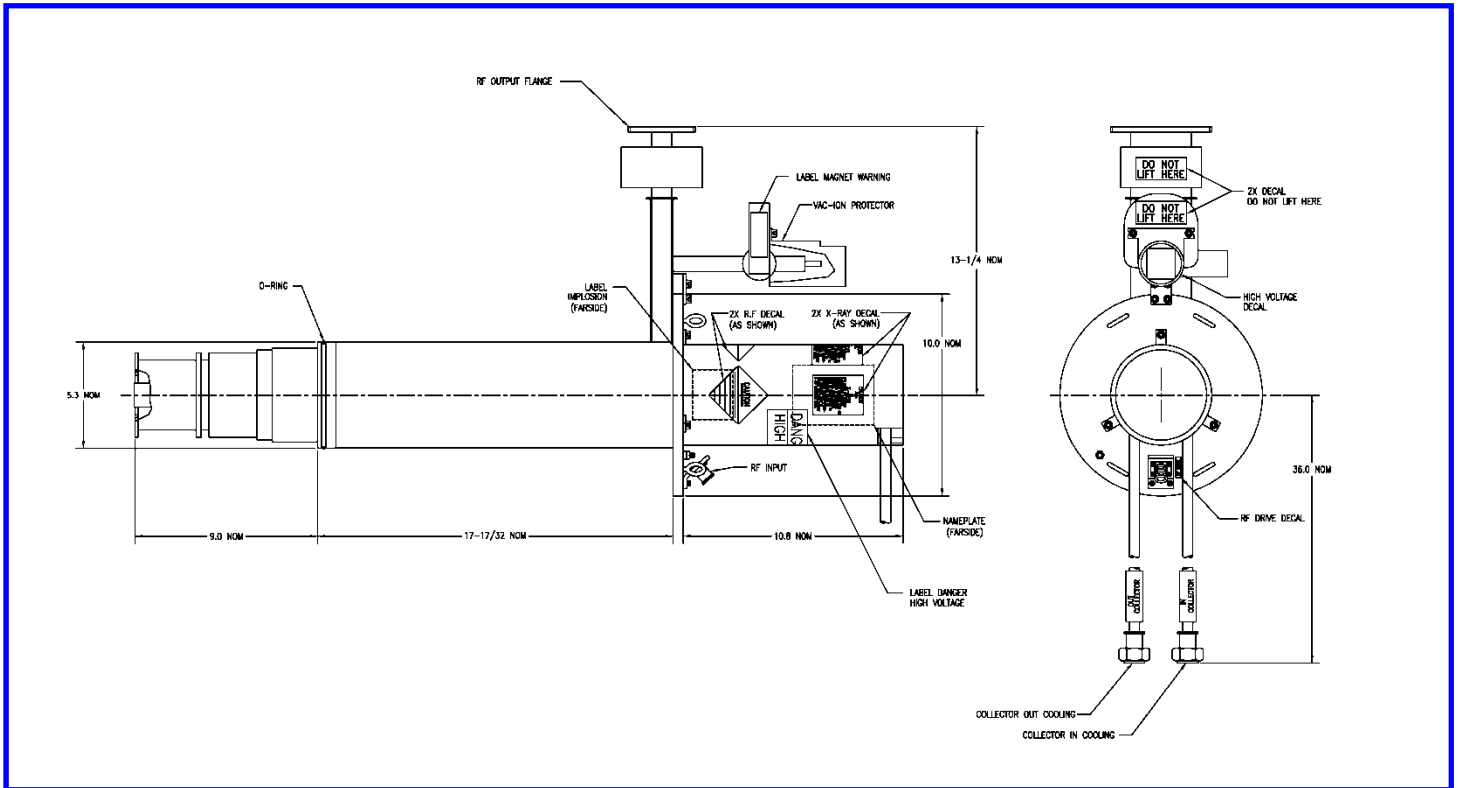
Mechanical Characteristics

Physical Dimensions (typical, inches).....	38 x 10 x 18.25
Weight (max, pounds).....	120
Focusing Solenoid	per 444923-JA
Focusing Solenoid Weight (max, pounds)	360
Mounting Position	Vertical, Collector up
RF Input Connector	Coaxial, type-N female
RF Output Waveguide	WR-284



This technical data and software is considered as Technology Software Publicly Available (TSPA) as defined in Export Administration Regulations (EAR) Part 734.7-11

L5822 Outline Drawing



Current detailed outline drawings are available on request. Specifications and features are subject to change without notice.