Klystron — Linear Accelerator Amplifier

L5822

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.

SPECIFICATIONS

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, µs)	5.8	5.8
Beam Pulse Width (max, µs)	9.0	9.0
Heater Volts (V_{ms})	7.5	7.5
Heater Current (A_{ms})	30 ± 3	30 ± 3
Ion Pump Voltage (min, kV)	3.0	3.0
Solenoid Voltage (max, Vdc)	108	108
Solenoid Current (Adc)	35 ± 1	35 ± 1

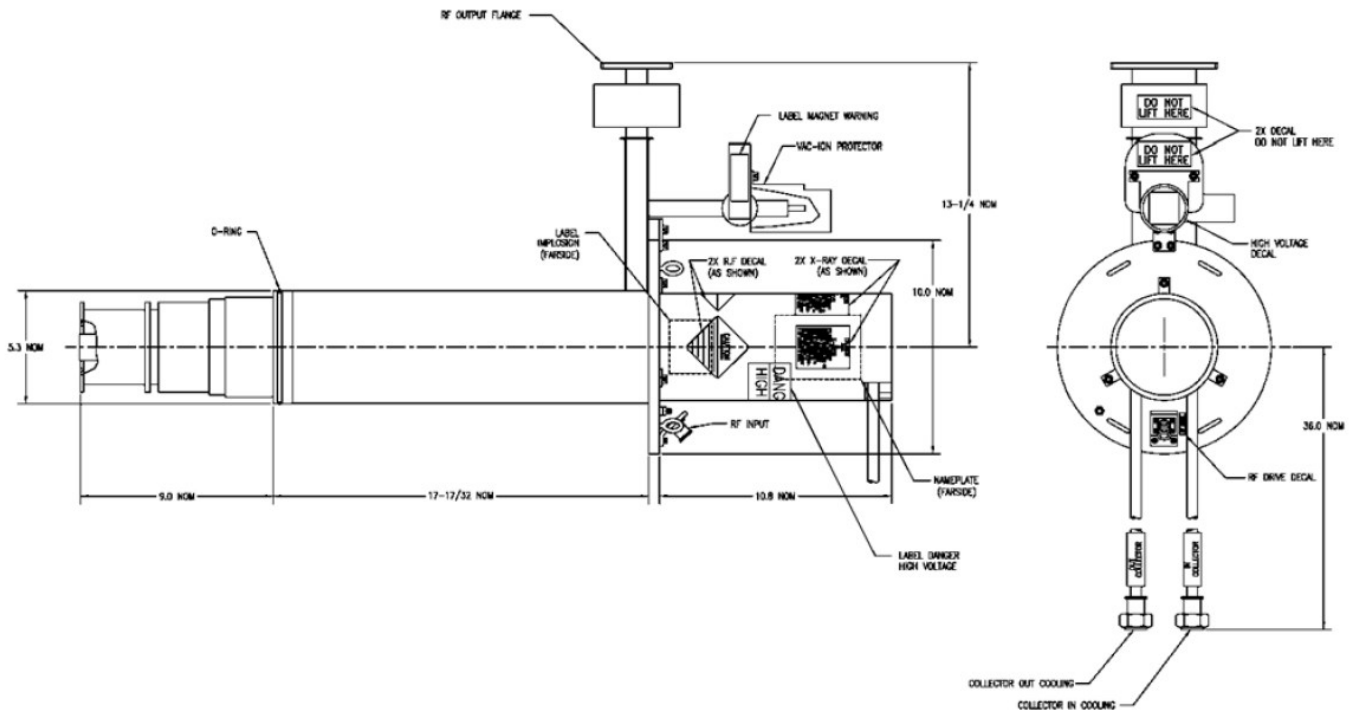
Operational Requirements	
Coolant, Water	
Inlet Temperature	35° ± 15°C
Body-Collector Flow Rate (min, GPM)	5.0
Body-Collector Pressure Drop @ 5 GPM (max, PSI)	15.0
Solenoid Flow Rate (min, GPM)	3.0
Solenoid Pressure Drop @ 3 GPM (max, PSI)	15.0
Oil Bath Temperature (max)	60°C
Waveguide Pressurization Gas	SF_6 or Freon 12
Waveguide Pressure (PSIG)	35 ± 10

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

Klystron — Linear Accelerator Amplifier

L5822

Outline Drawing (inches)



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

Headquarters
3100 Lomita Blvd
Torrance, CA 90505
T: 310-517-6000

Williamsport, PA
1035 Westminster Dr.
Williamsport, PA 17701
T: 570-326-3561

AS9100D CERTIFIED ISO 9001
Made in USA

StellantSystems.com
Sales-PST@stellantsystems.com
info@stellantsystems.com