

35KV Microwave Tube Test Set





Microwave Tube Test Set 35KV, 3 COLL, 10KV Grid Modulator

Cathode (Helix) Power Supply 35KV, 25KW

Cathode voltage: -100V to -35KV w/ respect to ground
Cathode current peak: 10A peak max
Helix current: 200ma average max. – Settable to 600mA
Helix current peak: 1A peak max. , crowbar response < 5us
Line load regulation - .1%
Helix current meter (digital): 1xx.xma
Cathode voltage meter (digital): .1x.xxxKV - 4 ½ digit meters
Cathode current meter (digital): 1.xxxma - 3 ½ digit meters
Cathode faults: OV, OC, factory set
Cathode output impedance - 150 ohms minimum
Cathode output capacitance 2uf minimum

Cathode Modulator/Tailbiter

Cathode peak voltage: 35KV
Cathode peak current: 10A - greater peak currents available
Frequency: Single shot to 1KHz
Duty: One shot to 100%
Pulse width: 3us min. to CW

Collector#1 Power Supply– depressed – 15KW max

Adjustability: -1KV to -17KV - WRT Gnd
Collector current: 600ma avg
Collector peak current: 10A
Collector faults: OV, OC, factory set
Collector voltage meter (digital): 1x.xxxKV - 4 ½ digit meters
Collector current meter (digital): 1.xxxma - 3 ½ digit meters
Collector output impedance - 25 ohms
Collector output capacitance .25uf minimum
Diode coupled collector output protection

Collector#2 Power Supply– depressed – 15KW max

Adjustability: -1KV to -17KV - WRT Gnd
Collector current: 600ma avg
Collector peak current: 10A
Collector faults: OV, OC, factory set
Collector voltage meter (digital): 1x.xxxKV - 4 ½ digit meters
Collector current meter (digital): 1.xxxma - 3 ½ digit meters
Collector output impedance - 25 ohms
Collector output capacitance .25uf minimum
Diode coupled collector output protection

Collector#3 Power Supply– depressed – 15KW max
Adjustability: -1KV to -17KV - WRT Gnd
Collector current: 600ma avg
Collector peak current: 10A
Collector faults: OV, OC, factory set
Collector voltage meter (digital): 1x.xxxKV - 4 ½ digit meters
Collector current meter (digital): 1.xxxma - 3 ½ digit meters
Collector output impedance - 25 ohms
Collector output capacitance .25uf minimum
Diode coupled collector output protection

Grid Modulator

Bias voltage: -80V to -7500V w/ respect to cathode
Pulse Voltage: 0V to +2500V w/respect to cathode
Bias current max: 10ma average;
Pulse top current: 20ma average max, 1A pk
Bias voltage meter (digital): xxxV
Ig current meter (digital): xxx.xma
Rise time: < 500ns
Fall time: < 500ns
Frequency: CW to 10KHz

Heater Power Supply

Heater voltage: -1V to -20V w/ respect to cathode
Heater current: 25A
Heater voltage meter (digital): xx.xxV - 3 ½ digit meters
Heater current meter(digital): xxx.xA - 3 ½ digit meters
Protection: OV, OC, factory set
Heater time: 0 to 599 seconds

Ion Pump Power Supply

Ion pump voltage: 0V to 4KV w/ respect to cathode
Ion pump current: 1mA short circuit
Ion pump voltage meter (digital): xx.xxV - 3 ½ digit meters
Ion pump meter (digital): xxx.xA - 3 ½ digit meters
Protection: OV, UV, OC, factory set

Focused Electrode Power Supplies – 5ea

Focus voltage: -0V to -5kv w/respect to GND
Focus current: 10mA
Focus voltage meter (digital): xx.xxV - 3 ½ digit meters
Focus current meter(digital): xxx.xA - 3 ½ digit meters
Protection: OV, OC, factory set
Heater time: 0 to 599 seconds

Protection

High-speed electronic crowbar system
Mechanical crowbar
System will detect: Iw peak, Iw average, Ik average, and grid peak current

External Interlocks

- Panel open
- EXT 1
- EXT 2

System Control

- Manual Control
- Front panel LED type 4.5/3.5 digit meters for voltage and current
- Front panel running time meters
- Heater time delay – 0 to 5 minutes
- Auto reset – for Iw avg, Iw pk, ig pk OC; External interlocks to be resettable

AC Input Power

- 480VAC, 3 PH, 60Hz

Cabinet

- 24wx30dx77h – 4each

Cooling

- Process water (filtered) – 6 GPM required, 35C max.