

F-2900 REFLEX KLYSTRON

### DESCRIPTION:

Type F-2900 Reflex Klystrons are millimeter wavelength tubes designed for operation in the 33 to 38 Gc frequency range. Each tube is fixed tuned and will deliver a minimum power output of one watt at its specific operating frequency in this range.\*

The specific operating frequency may be shifted 2% while maintaining a minimum output of I watt, by using the MT-80 mechanical tuner which is available as an optional accessory.

The electronic tuning range as measured between the half power points is 0.1% of the specific operating frequency.

The small size and rugged construction of these tubes make them suitable as test equipment primary signal sources, receiver local oscillators, parametric amplifier pumps and low power transmitters.

### TYPICAL OPERATION:

| Operating Frequency       | 34.7 | Gc    | Grid Voltage (with respect to cathode)  | <b>~5</b> 0 | Volts   |
|---------------------------|------|-------|-----------------------------------------|-------------|---------|
| Beam Voltage              | 2000 | Volts | Power Output                            | 1.1         | ₩att    |
| Beam Current              | 40   | ma    | Electronic Tuning (between 3 db points) | 35          | mc      |
| Reflector Voltage         |      |       | Heater Voltage                          | 6.3         | Volts   |
| (with respect to cathode) | -780 | Volts | Heater Current                          | 1.2         | Amperes |

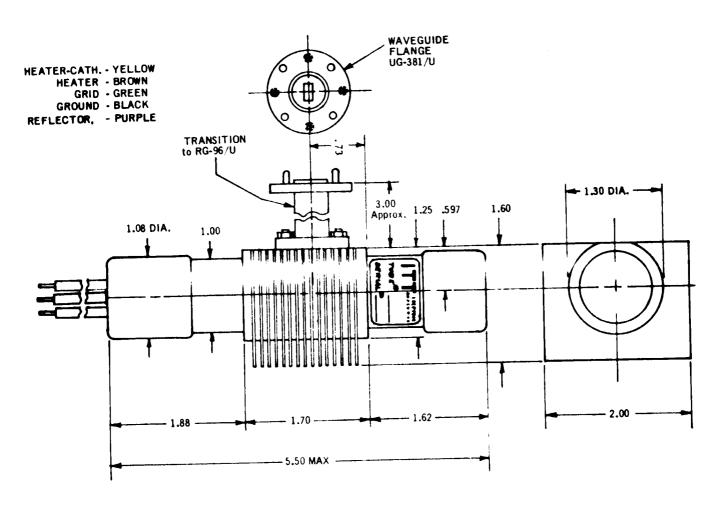
## MAXIMUM RATINGS:

| Beam Voltage | 2500 | Volts | Reflector Voltage | −25 to −1000 | Volts |
|--------------|------|-------|-------------------|--------------|-------|
| Beam Current | 50   | ma    | Grid Voltage      | 0 to -100    | Volts |

# **MECHANICAL SPECIFICATIONS:**

Cathode Dispenser Type Physical Dimensions See Outline Drawing
Cooling Forced Air RF Connection UG-381/U Flange
Weight 20 oz, RG-96/U Waveguide
Base Connection Flying Leads Mounting Position Any

F-2900 8mm REFLEX KLYSTRON OUTLINE



# OUTPUT MODE PATTERN VERSUS REFLECTOR VOLTAGE FOR TUBE TYPE F-2900

