

### DESCRIPTION:

X-Band Ruggedized Reflex Klystron. Former designation K465. Designed for local oscillator service where maximum frequency stability is required under conditions of extreme shock and vibration or sustained acceleration. Its compensated structure is designed to minimize frequency drift with time and temperature.

### RATINGS AND CHARACTERISTICS

#### ELECTRICAL RATINGS:

Heater Voltage	6.3V
Heater Current	0.95 amperes
D C. Resonator Voltage	350 V max.
Cathode Current	40 ma. max.
Frequency Range	8690—9410 MC

#### DC—Reflector Voltage

Positive Limit	—15 Min. V
Negative Limit	—500 Max. V

#### Cathode to Heater Voltage

75 V Max.

#### Reflector Current

< 2  $\mu$  Amperes

#### TUBE CHARACTERISTICS:

Cathode—Coated, Unipotential	
Life	500 Hours
Mounting Position	Any
Connections	See Mechanical
Cooling	Convection and conduction

#### Frequency Stability

a. 10 G vibration	10—2000 cps	$\Delta f < 1$ MC
b. Acceleration	200 G	$\Delta f < 5$ MC
c. Slack	200 G	$\Delta f < 2$ MC

#### Starting Time

After 8 Min.  $\pm$  3 Mc

#### Temperature Compensation

< .5 Mc per degree centegrade

#### TYPICAL OPERATING CONDITIONS:

DC Resonator Voltage	250 Volts
DC Cathode Current	28 ma.
Power Output	25 mW
Frequency	9050 Mc
Electronic Tuning Range	40 Mc
Voltage swing for above tuning	12 Volts
DC Reflector Voltage	—98 Volts
Min. power output 6 db mismatch	10 mW

