



EITEL-McCULLOUGH, INC.  
SAN CARLOS, CALIFORNIA

TENTATIVE DATA

EM-1114

X-BAND  
REFLEX KLYSTRON

**TYPICAL PERFORMANCE**

**ELECTRICAL PERFORMANCE**

Frequency Setting	- - - -	13.90 Gc
Mechanically Trimmable	- - - -	$\pm 20$ Mc
Power Output	- - - -	200 mW
Electronic Tuning Range		
(3 db bandwidth)	- - - -	25 Mc min
Resonator Voltage	- - - -	400 Vdc
Cathode Current	- - - -	40 mA
Repeller Voltage	- - - -	-280 Vdc
Modulation Sensitivity	- - - -	0.8 Mc/v max
Heater Voltage	- - - -	6.3 V(ac or dc) $\pm 5\%$
Heater Current	- - - -	1.3 A max
Mode	- - - -	3-3/4
VSWR of Load	- - - -	1.10:1
Temperature Coefficient	- - - -	-150 Kc/ $^{\circ}$ C
Warm-up Time	- - - -	30 seconds
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**MAXIMUM RATINGS**

Resonator Voltage	- - - -	500 Vdc
Cathode Current	- - - -	55 mA
Repeller Voltage (negative with respect to the cathode)	- - - -	(-50 to -500) Vdc

Note: Damage to the tube may occur if the maximum ratings are exceeded.

**MECHANICAL**

Operating Position	- - - -	Any
Electrical Connections	- - - -	Flexible Lead
RF Output Coupling	- - - -	RG-91/U waveguide
Cooling Required	- - - -	Conduction
Net Weight	- - - -	6 ounces
Shipping Weight (approximate)	- - - -	4 pounds

**ENVIRONMENTAL PERFORMANCE**

Temperature Range (Max Ambient)	- - - -	150 $^{\circ}$ C
Altitude	- - - -	100,000 ft. max
Vibration	- - - -	10 G, (20-2000 cps)
Shock	- - - -	40 G, (11 ms)

**OUTLINE DIMENSIONS**

Height	- - - -	1.40 inches
Width	- - - -	1.50 inches
Length	- - - -	2.10 inches

