J. E. Carlstrom Co
29-Oct-06

Oscillator: H474
Bias: 10.0 volts

Frequency (GHz)	Tuning Mic (mils)	Backshort (mils)	Output Power (mW)	Bias tuning dV/(100MHz)
62.0	129.8	132.0	13	0.50
63.0	121.5	125.5	9	0.40
64.0	113.4	118.5	9	0.40
65.0	105.3	111.5	5	0.40
66.0	98.2	161.0	14	0.25
67.0	93.4	159.5	86	0.40
68.0	86.7	158.5	83	0.20
69.0	79.6	154.5	61	0.35
70.0	73.9	150.5	61	0.35
71.0	71.1	73.5	109	0.15
72.0	65.8	50.3	116	0.30
73.0	61.0	48.5	118	0.15
74.0	56.3	2.5/132.0	122	0.30
75.0	52.7	110.0	120	0.35
76.0	49.0	100.5	112	0.35
77.0	45.9	77.0	119	0.35
78.0	42.9	69.5	116	0.30
79.0	40.2	50.0	114	0.30
80.0	37.8	28.5	107	0.30
81.0	35.5	4.5/111.0	101	0.30
82.0	33.4	91.5	89	0.35
83.0	31.5	82.0	78	0.35
84.0	29.8	73.0	68	0.35
85.0	28.2	67.5	56	0.35
86.0	26.7	63.5	47	0.35
87.0	25.3	58.0	38	0.35
88.0	24.0	54.0	25	0.35
89.0	22.9	52.5	20	0.35
90.0	21.8	51.5	13	0.35
91.0	20.7	50.0	23	0.40
92.0	19.6	49.0	20	0.40
93.0	18.7	46.0	21	0.40
94.0	17.8	40.5	13	0.40
95.0	17.0	51.0	10	0.30
96.0	16.1	41.5	27	0.30

(continued)

Frequency (GHz)	Tuning Mic (mils)	Backshort (mils)	Output Power (mW)	Bias tuning dV/(100MHz)
97.0	15.3	36.5	24	0.30
98.0	14.6	34.0	25	0.30
99.0	13.9	31.5	24	0.30
100.0	13.1	28.5	22	0.35
101.0	12.6	26.5	22	0.35
102.0	11.9	23.5	21	0.30
103.0	11.2	20.5	19	0.30
104.0	10.7	17.5	17	0.30
105.0	10.0	14.5	16	0.35
106.0	9.5	9.5	13	0.30

Bias = 10.0 Volts; ~200 mA; **Do not operate above 10.5 Volts.**

INTERNAL PROTECTIVE CIRCUITRY - Internal protection is provided against overvoltage and reverse bias. Bias greater than 10.8 Volts will trip crowbar circuit. Turn oscilllator off to reset.

Do not remove micrometer knobs or disassemble oscillators.

Backshort position that provides highest output power and best frequency tuning is near position that 'pulls' to highest output frequency.

Please note: the crowbar protection circuit tripping without apparent cause could indicate a problem internal to the oscillator, such as an intermittent short which could destroy the Gunn diode. To inspect for this problem, turn off oscillator and remove bias supply. Then check the bias port for a short condition with an ohm meter as the oscillator is mechanically tuned though its full range. The typical resistance is 5 - 10 ohms.
Do not operate the oscillator if any short circuits are found.