

e) Set TRIGGER LEVEL for stable values on display. (Start with knob indicator at zero, or midposition.)

f) Observe OVERFLOW indicator. If ON, operate rotary switch to select lower value gate time of 0.1sec. If OVERFLOW remains ON when gate time is 0.1s, then input signal is above 100MHz specification limit.

If OVERFLOW is OFF, and if greater resolution is desired, operate rotary switch to increase gate time to 10s position. In this position, measurement will be repeated in 10.3 seconds, and least significant digit will indicate 0.1Hz increments.

g) Read display directly in kilohertz when value is stable. Table 2-2 summarizes the operation of the Model 5740 for different control settings in measuring two frequency input signals.

2.4 MEASURE PERIOD

2.4.1 General

In PERIOD Mode, the Model 5740 counts time increments for a number of pulses determined by the axis crossings of the input signal and as selected by the operation of the front panel rotary switch. The decimal point is automatically positioned so that the displayed period or average period value may be read directly in microseconds.

2.4.2 Stop-by-Stop Procedure

a) Operate the MODE slide switch to PERIOD-EVENTS.

b) Operate rotary switch to 100 (100 periods to be averaged.)

Table 2-2

MODEL 5740 FREQUENCY MEASUREMENT PARAMETERS

Input Frequency MHz	GATE TIME Settling Time Gate is open	Display Resolution (LSD)	Overflow	Display*
1.2345678	10 sec	.1Hz	ON	234.5678
	1 sec	1Hz	OFF	1234.567
	.1 sec	10Hz	OFF	01234.56
	.01 sec	100Hz	OFF	001234.5
99.999999	10 sec	.1Hz	ON	999.9900
	1 sec	1Hz	ON	9999.990
	100 msec	10Hz	OFF	99999.99
	10 msec	100Hz	OFF	999999.9

*For greatest resolution, use Time Base setting for minimum number of leading zero's without OVERFLOW.