

## DATA-TO-CLOCK JITTER

### ACTION / DESCRIPTION

1. Set the Time Markers On.
2. Select the  $T_1$  marker.
3. Rotate the knob to set the marker at the start of VCO step.
4. Select the  $T_2$  marker.
5. Rotate the knob to set the marker where the VCO settles at new frequency.

The transition time is the delta time value below the waveform display (approximately 140  $\mu$ s).

- |                                   |                                      |
|-----------------------------------|--------------------------------------|
| • Filter distribution (histogram) | • Peak-to-Peak and RMS jitter        |
| • Mean value                      | • Probability                        |
| • Minimum and Maximum             | • Jitter rate of periodic components |

### Data-to-Clock Jitter Start-up

Set the Signal Source to On and select Data-to-Clock Jitter.

Press the Preset key.

Press the Time Int A-H function using the top soft key.

Press the Autoscale key.

Notice that the data on the display is not stable. This is because there is a lot of frequency jitter where the Analyzer is trying to trigger on the time interval. For stable triggering on this signal, the Analyzer has a feature to reject triggering intervals changing at a higher rate (frequency) than the majority of the time. This is near the trigger point. The next two steps demonstrate this feature.

Press the Trigger menu key.

Set Trig HF Reject to On using the bottom soft key.

Go to the next page to see how to analyze this signal.

