FG085 Distortion Test Report

Date of Test: Dec. 5, 2015
Location of Test: JYE Tech Ltd., Guilin

1. Information about devices to be tested
   Model: FG085
   Part Number: 08503P
   Number of devices to be tested: 5

2. Equipment Used in the Test
   1) GAD-201G automatic distortion meter (manufacturer: GW Instek, [http://www.gwinstek.com](http://www.gwinstek.com))
   2) DS1102E oscilloscope (manufacturer: Rigol, [http://www.rigol.com](http://www.rigol.com))
   3) 15V/1A switching mode power adapter

3. Test Setup and Procedures
   1) Connection Diagram

   ![Connection Diagram](image)

   Fig. 1

   ![Connection Diagram](image)

   Fig. 2
2) Test Procedures
   a) Connect distortion meter, oscilloscope, and DUT as described in 1) above.
   b) Power up distortion meter, oscilloscope, and DUT.
   c) Select distortion meter frequency range to 10K by depressing the push button labeled “10KHz” on front panel.
   d) Set oscilloscope sensitivity to 2V/div, timebase to 50us/div, and vertical position to the middle of vertical scale.
   e) Set DUT to following parameters respectively:
      Condition 1: Output frequency: 10KHz
                    Offset: 0V
                    Amplitude: 5Vpp
      Condition 2: Output frequency: 10KHz
                    Offset: 0V
                    Amplitude: 10Vpp
   f) Monitor waveform on oscilloscope to make sure waveform type, amplitude, and offset meet test conditions.
   g) On distortion meter turn the “Tuning Freq” knob to the direction indicated by the “High” or “Low” indicators if they light up until both indicators are off.
   h) Read test result on distortion meter by combining range indicator and scale reading.
4. Test Results

<table>
<thead>
<tr>
<th>Sample #</th>
<th>Distortion (%) under Condition 1 (5Vpp)</th>
<th>Distortion (%) under Condition 2 (10Vpp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.92</td>
<td>0.91</td>
</tr>
<tr>
<td>2</td>
<td>0.99</td>
<td>0.99</td>
</tr>
<tr>
<td>3</td>
<td>1.28</td>
<td>1.30</td>
</tr>
<tr>
<td>4</td>
<td>1.18</td>
<td>1.19</td>
</tr>
<tr>
<td>5</td>
<td>1.18</td>
<td>1.20</td>
</tr>
</tbody>
</table>

5. Photos

5Vpp -- Sample #1
5Vpp -- Sample #2

5Vpp -- Sample #3
5Vpp -- Sample #4

5Vpp -- Sample #5
10Vpp -- Sample #1

10Vpp -- Sample #2
10Vpp -- Sample #5

10Vpp -- Sample #2