PMI MODEL: PLA-14D65G15G35G-20DB-SFF-250W IS AN INTEGRATED LIMITER AND ATTENUATOR THAT OPERATES AT 14.65 TO 15.35 GHz. THE INSERTION LOSS IS 3.5 dB MAXIMUM AND OFFERS 20 dB OF ATTENUATION CONTROL VIA A SINGLE LINE TTL SIGNAL. THIS MODEL IS DESIGNED TO HANDLE 125 WATTS PEAK HAVING A PULSE WIDTH OF 40 µs AND AN AVERAGE POWER OF 12.5 WATTS.

February 17, 2018

Designed By: PMI Engineering

Tested & Reported By: Sebastian Palacio
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TEST DATA ON PLA-14D65G15G35G-20DB-SFF-250W

DESCRIPTION
PMI MODEL: PLA-14D65G15G35G-20DB-SFF-250W IS AN INTEGRATED LIMITER AND ATTENUATOR THAT OPERATES AT 14.65 TO 15.35 GHz. THE INSERTION LOSS IS 3.5 dB MAXIMUM AND OFFERS 20 dB OF ATTENUATION CONTROL VIA A SINGLE LINE TTL SIGNAL, THIS MODEL IS DESIGNED TO HANDLE 250 WATTS PEAK HAVING A PULSE WIDTH OF 40 ns AND AN AVERAGE POWER OF 25 WATTS.

SPECIFICATIONS
- FREQUENCY RANGE: 14.65 TO 15.35 GHz
- INSERTION LOSS: 3.5 dB MAX
- PEAK POWER HANDLING: 250 W MAX
- PULSE WIDTH: 40 µS TYP
- AVERAGE POWER: 25 W MAX
- ATTENUATION: LOGIC TTL "0" - 0 dB ATTENUATION
- ATTENUATION FLATNESS: ±1 dB MAX
- ATTENUATION ACCURACY: ±1 dB MAX
- P4 dB LIMITING THRESHOLD: ±5 dBm MIN
- FLAT LEAKAGE: ±12 dBm MAX
- SWITCHING SPEED: 90 ns @ 50% TTL TO 10% RF VOLTAGE MAX
- 90 ns @ 50% TTL TO 80% RF VOLTAGE MAX
- CONTROL LOGIC: TTL COMPATIBLE
- PHASE MATCH: 15° MAX (UNIT TO UNIT)
- DC CONSUMPTION: 150 mA MAX EACH FOR +5 V & -15 V
- VSWR: 2.0:1 MAX @ -10 dBm INPUT
- RF CONNECTORS: REMOVABLE SMA FEMALE
- FINISH: 0035 SILVER PLATE OVER COPPER FLASH IAW QQ-S-365 TYPE 1, GRADE A

ENVIRONMENTAL RATINGS
- TEMPERATURE: -55 °C TO +85 °C (OPERATING)
- -55 °C TO +125 °C (STORAGE)
- HUMIDITY: MIL-STD-810F
- SHOCK: MIL-STD-810F, METHOD 616.5, PROCEDURE 1
- VIBRATION: MIL-STD-810F, METHOD 514.5
- ALTITUDE: MIL-STD-810F, METHOD 520.2, PROCEDURE 3
- TEMPERATURE CYCLE: MIL-STD-810F, METHOD 501.4, 502.4

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE.
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE ON REVISION

*PENDING ECN, RELEASE UPDATED REV. UPON CUSTOMER'S APPROVAL OF TEST RESULTS*

Page 3 of 37

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731 Email: sales@pmi-rf.com
### Revised Technical Specifications (updated 1 Dec 2017 v2)

#### B) Electrical Specifications

1) Frequency Range: 14.65 to 15.35GHz  
2) Insertion Loss: 3.59dB max @ -10dBm input and 0dB attenuation (3 temp)  
3) Peak Power Handling

<table>
<thead>
<tr>
<th>Sn</th>
<th>Condition</th>
<th>Peak Power Handling</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low Temp (-55 degC)</td>
<td>100W max@0dB and 20dB attenuation at 10% duty cycle</td>
</tr>
<tr>
<td>2</td>
<td>Room Temp (+25 deg C)</td>
<td>125W max@0dB and 20dB attenuation at 10% duty cycle</td>
</tr>
<tr>
<td>3</td>
<td>High Temp (+85 deg C)</td>
<td>100W max@0dB and 20dB attenuation at 10% duty cycle</td>
</tr>
</tbody>
</table>

4) Pulse Width: 40µS (typ) @ 0dB and 20dB attenuation at 10% duty cycle  
5) Average Power

<table>
<thead>
<tr>
<th>Sn</th>
<th>Condition</th>
<th>Average Power Handling</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low Temp (-55 degC)</td>
<td>10W max@0dB and 20dB attenuation at 10% duty cycle</td>
</tr>
<tr>
<td>2</td>
<td>Room Temp (+25 deg C)</td>
<td>12.5W max@0dB and 20dB attenuation at 10% duty cycle</td>
</tr>
<tr>
<td>3</td>
<td>High Temp (+85 deg C)</td>
<td>10W max@0dB and 20dB attenuation at 10% duty cycle</td>
</tr>
</tbody>
</table>

6) Attenuation: Logic TTL “0” = 0dB attenuation  
   Logic TTL “1” = 20dB attenuation  
7) Attenuation Flatness: ±1dB max  
8) Attenuation Accuracy: ±1dB max  
9) P1dB Limiting Threshold: +5dBm min  
10) Flat Leak: ±12dBm max @ 0dB attenuation and  

<table>
<thead>
<tr>
<th>Sn</th>
<th>Condition</th>
<th>Power Handling</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low Temp (-55 degC)</td>
<td>100W max</td>
</tr>
<tr>
<td>2</td>
<td>Room Temp (+25 deg C)</td>
<td>125W max</td>
</tr>
<tr>
<td>3</td>
<td>High Temp (+85 deg C)</td>
<td>100W max</td>
</tr>
</tbody>
</table>

11) Switching Speed: 90ns max @ 50% TTL to 10% RF voltage  
    @ 50% TTL to 90% RF voltage  
12) Control Logic: TTL compatible  
13) Phase Match: ±15 deg max (unit to unit)  
14) DC Consumption: 150mA max each for +5V and -15V  
15) VSWR: 2.0:1 max @ -10dBm input

---

### Mechanical Specifications

1) RF Connectors: Removable SMA Female (J2 is RF input and J1 is RF output)  
2) DC/Control Connectors: Pins/Feedthrough  
3) Outline: See drawing  
4) Surface finish: Silver plating

### Environmental Specifications

1) Operating temperature: -55 degC to +85 degC  
2) Storage temperature: -55 degC to +125 degC
### TEST DATA
**ON**
**PLA-14D65G15G35G-20DB-SFF-250W**

**Customer:** Precision Technologies  
**Tested By:** S. Palacio  
**QA/QC By:** J. Peacher  
**Sign:**  
**Temperature:** -55°C, +25°C, +85°C  
**Date:** 2/17/2018  
**Drawing No:** 27629633  
**Rev:** B1

<table>
<thead>
<tr>
<th>TEST ITEM NO</th>
<th>PARAMETERS</th>
<th>SPECIFIED VALUE</th>
<th>TEST MEASUREMENT</th>
<th>TEST RESULT</th>
<th>QA QC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Frequency Range</td>
<td>14.65 To 15.35 GHz</td>
<td>14.65 To 15.35 GHz</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Insertion Loss</td>
<td>3.59 dB Max¹</td>
<td>3.5 dB</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Power Handling</td>
<td>100 W (-55°C &amp; +85°C) / 125 W (+25°C) Max²</td>
<td>Pass</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Pulse Width</td>
<td>40 μs Typ²</td>
<td>40 μs</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Average Power</td>
<td>10 W (-55°C &amp; +85°C) / 12.5 W (+25°C) Max²</td>
<td>Pass</td>
<td>Pass</td>
<td></td>
</tr>
</tbody>
</table>
| 6            | Attenuation | Logic TTL "0" = 0 dB  
Logic TTL "1" = 20 dB | Pass | Pass | |
| 7            | Attenuation Flatness | ±1 dB Max | ±0.1 dB | Pass | |
| 8            | Attenuation Accuracy | ±1 dB Max | ±0.1 dB | Pass | |
| 9            | P1dB Limiting Threshold | +5 dBm Min | 7.7 dBm | Pass | |
| 10           | Flat Leakage | +12 dBm Max³ | +20 dBm | FAIL | |
| 11           | Switching Speed | 90 ns, 50% TTL To 10% RF Max  
90 ns, 50% TTL To 90% RF Max | 20 ns  
50 ns | Pass | |
| 12           | Phase Matching | 15° Max Between Units @ 0 dB  
15° Max Between Units @ 20 dB | 0° - REF.  
0° - REF. | Pass | |
| 13           | DC Consumption | +5 V @ 150 mA Max | 32 mA | Pass | |
| 14           | DC Consumption | -15 V @ 150 mA Max | 26 mA | Pass | |
| 15           | VSWR | 2.0:1 Max @ -10 dBm Input | 1.89:1 | Pass | |

1. @ -10 dBm Input & 0 dB Attenuation  
2. @ 0 dB & 20 dB Attenuation with 10% Duty Cycle  
3. @ 0 dB Attenuation & 100 W (-55°C & +85°C) / 125 W (+25°C) Max.

QA/QC Approval: ___________________________  
Date: ___________________________

Page 5 of 37
PL21778/1744 (Reference Unit)

Insertion Loss, Return Loss (IN/OUT) & Phase Matching

@ +25 Degrees C
@ +85 Degrees C
TEST DATA ON
PLA-14D65G15G35G-20DB-SFF-250W

@ -55 Degrees C
Attenuation, Attenuation Flatness, Attenuation Accuracy, Return Loss (IN/OUT) & Phase Matching

@ +25 Degrees C
@ +85 Degrees C
@ -55 Degrees C
Switching Speed

Green Trace – TTL Signal
Blue Trace – RF Signal
FLAT LEAKAGE TEST

**Input Power vs Output Power**

**15GHz / +25 Degrees C**

**Input Power vs Output Power**

**15GHz / +85 Degrees C**

**Input Power vs Output Power**

**15GHz / -55 Degrees C**

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## TEST DATA ON

**PLA-14D65G15G35G-20DB-SFF-250W**

**Customer:**

**SO No:**

**Model No:** PLA-14D65G15G35G-20DB-SFF-250W

**Serial No:** PL21779/1744

**Tested By:** S. Palacio

**QA/QC By:** J. Peacher

**Sign:**

**SO No:**

**Temperature:** -55°C, +25°C, +85°C

**Date:** 2/17/2018

**Drawing No:** 27629633

**Rev:** B1

### TEST ITEM NO | PARAMETERS | SPECIFIED VALUE | TEST MEASUREMENT | TEST RESULT | QA/QC
--- | --- | --- | --- | --- | ---
1 | Frequency Range | 14.65 To 15.35 GHz | 14.65 To 15.35 GHz | Pass |  
2 | Insertion Loss | 3.59 dB Max | 3.5 dB | Pass |  
3 | Power Handling | 100 W (-55°C & +85°C) / 125 W (+25°C) Max | Pass | Pass |  
4 | Pulse Width | 40 μs Typ | 40 μs | Pass |  
5 | Average Power | 10 W (-55°C & +85°C) / 12.5 W (+25°C) Max | Pass | Pass |  
6 | Attenuation | Logic TTL “0” = 0 dB | Logic TTL “1” = 20 dB | Pass | Pass |  
7 | Attenuation Flatness | ±1 dB Max | ±0.18 dB | Pass |  
8 | Attenuation Accuracy | ±1 dB Max | ±0.16 dB | Pass |  
9 | P1dB Limiting Threshold | +5 dBm Min | 8.3 dBm | Pass |  
10 | Flat Leakage | +12 dBm Max | +20 dBm | FAIL |  
11 | Switching Speed | 90 ns, 50% TTL To 10% RF Max | 20 ns | Pass |  
12 | Phase Matching | 15° Max Between Units @ 0 dB | -2.2° / +1.4° | Pass |  
13 | DC Consumption | +5 V @ 150 mA Max | 32 mA | Pass |  
14 | DC Consumption | -15 V @ 150 mA Max | 26 mA | Pass |  
15 | VSWR | 2.0:1 Max @ -10 dBm Input | 1.94:1 | Pass |  

1. @ -10 dBm Input & 0 dB Attenuation
2. @ 0 dB & 20 dB Attenuation with 10% Duty Cycle
3. @ 0 dB Attenuation & 100 W (-55°C & +85°C) / 125 W (+25°C) Max.

QA/QC Approval: ___________________________ Date: ___________________________
PL21779/1744 (Temperature Performance Against Reference Unit)

Insertion Loss, Return Loss (IN/OUT) & Phase Matching

@ +25 Degrees C
@ +85 Degrees C
TEST DATA
ON
PLA-14D65G15G35G-20DB-SFF-250W

@ -55 Degrees C
TEST DATA
ON
PLA-14D65G15G35G-20DB-SFF-250W

Attenuation, Attenuation Flatness, Attenuation Accuracy, Return Loss (IN/OUT) & Phase Matching

@ +25 Degrees C
@ +85 Degrees C
Switching Speed

Green Trace – TTL Signal
Blue Trace – RF Signal
FLAT LEAKAGE TEST

Input Power vs Output Power
15GHz / +25 Degrees C

Input Power vs Output Power
15GHz / +85 Degrees C

Input Power vs Output Power
15GHz / -55 Degrees C
## TEST DATA ON
PLA-14D65G15G35G-20DB-SFF-250W

<table>
<thead>
<tr>
<th>TEST ITEM NO</th>
<th>PARAMETERS</th>
<th>SPECIFIED VALUE</th>
<th>TEST MEASUREMENT</th>
<th>TEST RESULT</th>
<th>QA QC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Frequency Range</td>
<td>14.65 To 15.35 GHz</td>
<td>14.65 To 15.35 GHz</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Insertion Loss</td>
<td>3.59 dB Max¹</td>
<td>3.36 dB</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Power Handling</td>
<td>100 W (-55°C &amp; +85°C) / 125 W (+25°C) Max²</td>
<td>Pass</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Pulse Width</td>
<td>40 μs Typ²</td>
<td>40 μs</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Average Power</td>
<td>10 W (-55°C &amp; +85°C) / 12.5 W (+25°C) Max²</td>
<td>Pass</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Attenuation</td>
<td>Logic TTL “0” = 0 dB Logic TTL “1” = 20 dB</td>
<td>Pass</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Attenuation Flatness</td>
<td>±1 dB Max</td>
<td>±0.03 dB</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Attenuation Accuracy</td>
<td>±1 dB Max</td>
<td>±0.45 dB</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>P1dB Limiting Threshold</td>
<td>+5 dBm Min</td>
<td>6.6 dBm</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Flat Leakage</td>
<td>+12 dBm Max³</td>
<td>+20 dBm</td>
<td>FAIL</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Switching Speed</td>
<td>90 ns, 50% TTL To 10% RF Max</td>
<td>20 ns</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Phase Matching</td>
<td>15° Max Between Units @ 0 dB</td>
<td>-2.5° / 0°</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>DC Consumption</td>
<td>+5 V @ 150 mA Max</td>
<td>32 mA</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>DC Consumption</td>
<td>-15 V @ 150 mA Max</td>
<td>26 mA</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>VSWR</td>
<td>2.0:1 Max @ -10 dBm Input</td>
<td>1.91:1</td>
<td>Pass</td>
<td></td>
</tr>
</tbody>
</table>

1. @ -10 dBm Input & 0 dB Attenuation
2. @ 0 dB & 20 dB Attenuation with 10% Duty Cycle
3. @ 0 dB Attenuation & 100 W (-55°C & +85°C) / 125 W (+25°C) Max.

QA/QC Approval: __________________________ Date: __________________________
PL21780/1744
Insertion Loss, Return Loss (IN/OUT) & Phase Matching
@ +25 Degrees C
TEST DATA ON
PLA-14D65G15G35G-20DB-SFF-250W

Attenuation, Attenuation Flatness, Attenuation Accuracy, Return Loss (IN/OUT) & Phase Matching

@ +25 Degrees C
TEST DATA
ON
PLA-14D65G15G35G-20DB-SFF-250W

Switching Speed

Green Trace – TTL Signal
Blue Trace – RF Signal
TEST DATA
ON
PLA-14D65G15G35G-20DB-SFF-250W

FLAT LEAKAGE TEST

Input Power vs Output Power
15GHz / +25 Degrees C

Input Power vs Output Power
15GHz / +85 Degrees C

Input Power vs Output Power
15GHz / -55 Degrees C

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<table>
<thead>
<tr>
<th>TEST ITEM NO</th>
<th>PARAMETERS</th>
<th>SPECIFIED VALUE</th>
<th>TEST MEASUREMENT</th>
<th>TEST RESULT</th>
<th>QA QC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Frequency Range</td>
<td>14.65 To 15.35 GHz</td>
<td>14.65 To 15.35 GHz</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Insertion Loss</td>
<td>3.59 dB Max^1</td>
<td>2.78 dB</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Power Handling</td>
<td>100 W (-55°C &amp; +85°C) / 125 W (+25°C) Max^2</td>
<td>Pass</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Pulse Width</td>
<td>40 μs Typ^2</td>
<td>40 μs</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Average Power</td>
<td>10 W (-55°C &amp; +85°C) / 12.5 W (+25°C) Max^2</td>
<td>Pass</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Attenuation</td>
<td>Logic TTL “0” = 0 dB</td>
<td>Pass</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Attenuation Flatness</td>
<td>±1 dB Max</td>
<td>±0.09 dB</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Attenuation Accuracy</td>
<td>±1 dB Max</td>
<td>±0.12 dB</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>P1dB Limiting Threshold</td>
<td>+5 dBm Min</td>
<td>7.1 dBm</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Flat Leakage</td>
<td>+12 dBm Max^3</td>
<td>+20 dBm</td>
<td>FAIL</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Switching Speed</td>
<td>90 ns, 50% TTL To 10% RF Max</td>
<td>20 ns</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Phase Matching</td>
<td>15° Max Between Units @ 0 dB</td>
<td>-0.4° / +2.1°</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>DC Consumption</td>
<td>+5 V @ 150 mA Max</td>
<td>32 mA</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>DC Consumption</td>
<td>-15 V @ 150 mA Max</td>
<td>26 mA</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>VSWR</td>
<td>2.0:1 Max @ -10 dBm Input</td>
<td>1.72:1</td>
<td>Pass</td>
<td></td>
</tr>
</tbody>
</table>

1. @ -10 dBm Input & 0 dB Attenuation
2. @ 0 dB & 20 dB Attenuation with 10% Duty Cycle
3. @ 0 dB Attenuation & 100 W (-55°C & +85°C) / 125 W (+25°C) Max.
PL21781/1744
Insertion Loss, Return Loss (IN/OUT) & Phase Matching
@ +25 Degrees C
Attenuation, Attenuation Flatness, Attenuation Accuracy, Return Loss (IN/OUT) & Phase Matching

@ +25 Degrees C
Switching Speed

Green Trace – TTL Signal
Blue Trace – RF Signal
FLAT LEAKAGE TEST

Input Power vs Output Power
15GHz / +25 Degrees C

Input Power vs Output Power
15GHz / +85 Degrees C

Input Power vs Output Power
15GHz / -55 Degrees C
# Test Data

## On

**Model No:** PLA-14D65G15G35G-20DB-SFF-250W

<table>
<thead>
<tr>
<th>TEST ITEM NO</th>
<th>PARAMETERS</th>
<th>SPECIFIED VALUE</th>
<th>TEST MEASUREMENT</th>
<th>TEST RESULT</th>
<th>QA QC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Frequency Range</td>
<td>14.65 To 15.35 GHz</td>
<td>14.65 To 15.35 GHz</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Insertion Loss</td>
<td>3.59 dB Max¹</td>
<td>2.7 dB</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Power Handling</td>
<td>100 W (-55°C &amp; +85°C) / 125 W (+25°C) Max²</td>
<td>Pass</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Pulse Width</td>
<td>40 μs Typ²</td>
<td>40 μs</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Average Power</td>
<td>10 W (-55°C &amp; +85°C) / 12.5 W (+25°C) Max²</td>
<td>Pass</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Attenuation Ratio</td>
<td>Logic TTL “0” = 0 dB</td>
<td>±0.055 dB</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Attenuation Flatness</td>
<td>±1 dB Max</td>
<td>±0.16 dB</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Attenuation Accuracy</td>
<td>±1 dB Max</td>
<td>±0.16 dB</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>P1dB Limiting Threshold</td>
<td>+5 dBm Min</td>
<td>10.85 dBm</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Flat Leakage</td>
<td>+12 dBm Max³</td>
<td>+20 dBm</td>
<td>FAIL</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Switching Speed</td>
<td>90 ns, 50% TTL To 10% RF Max</td>
<td>20 ns</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Phase Matching</td>
<td>15° Max Between Units @ 0 dB</td>
<td>-2.1° / 0°</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>DC Consumption</td>
<td>+5 V @ 150 mA Max</td>
<td>32 mA</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>DC Consumption</td>
<td>-15 V @ 150 mA Max</td>
<td>26 mA</td>
<td>Pass</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>VSWR</td>
<td>2.0:1 Max @ -10 dBm Input</td>
<td>1.84:1</td>
<td>Pass</td>
<td></td>
</tr>
</tbody>
</table>

1. @ -10 dBm Input & 0 dB Attenuation
2. @ 0 dB & 20 dB Attenuation with 10% Duty Cycle
3. @ 0 dB Attenuation & 100 W (-55°C & +85°C) / 125 W (+25°C) Max.

QA/QC Approval: ___________________________  Date: ___________________________
PL21782/1744
Insertion Loss, Return Loss (IN/OUT) & Phase Matching

@ +25 Degrees C
TEST DATA
ON
PLA-14D65G15G35G-20DB-SFF-250W

Attenuation, Attenuation Flatness, Attenuation Accuracy, Return Loss (IN/OUT) & Phase Matching

@ +25 Degrees C
Switching Speed

**Green Trace – TTL Signal**

**Blue Trace – RF Signal**
TEST DATA ON PLA-14D65G15G35G-20DB-SFF-250W

FLAT LEAKAGE TEST

Input Power vs Output Power
15GHz / +25 Degrees C

Input Power vs Output Power
15GHz / +85 Degrees C

Input Power vs Output Power
15GHz / -55 Degrees C

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