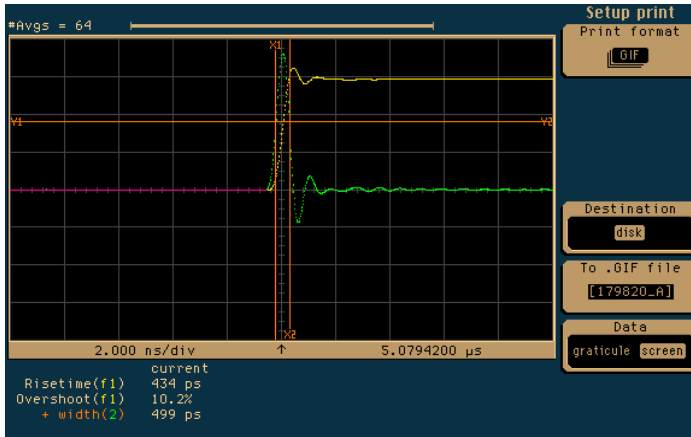


**Model Type: DLP-2 (DC to 1GHz Version, Narrow Key)**

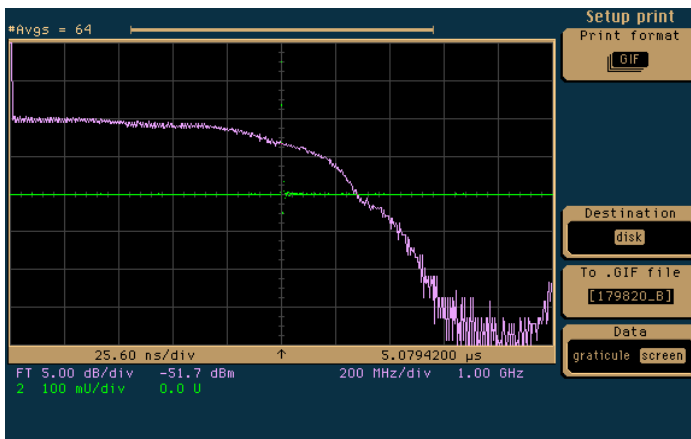
**Serial Number: xxxxxx**



**Fig.1 Impulse / Step Response  
Positive Optical Input**

X-axis: 2ns / div  
Y-axis: 100mV / div

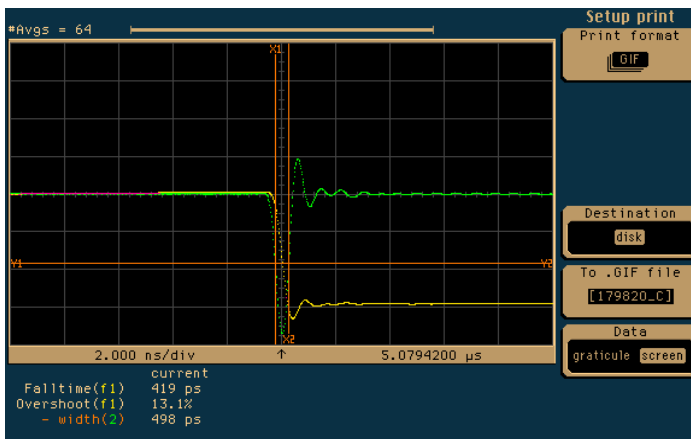
Light Source: Modified WSM-2  
1550nm pulsation light source  
(Graviton Inc.)  
Oscilloscope: 83480A+83485A  
Digital Communications Analyzer  
(Agilent Technology)



**Fig.2 Frequency Response  
Positive Optical Input**

(Calculated from the impulse response  
shown above)

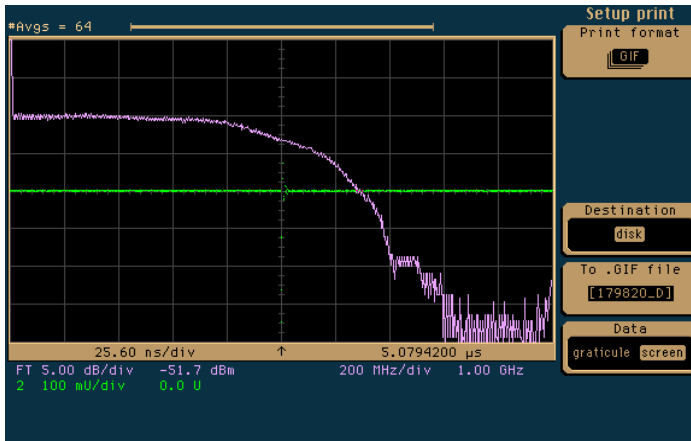
X-axis: 200MHz / div  
Y-axis: 5dBElectrical / div  
Center Frequency: 1GHz



**Fig.3 Impulse / Step Response  
Negative Optical Input**

X-axis: 2ns / div  
Y-axis: 100mV / div

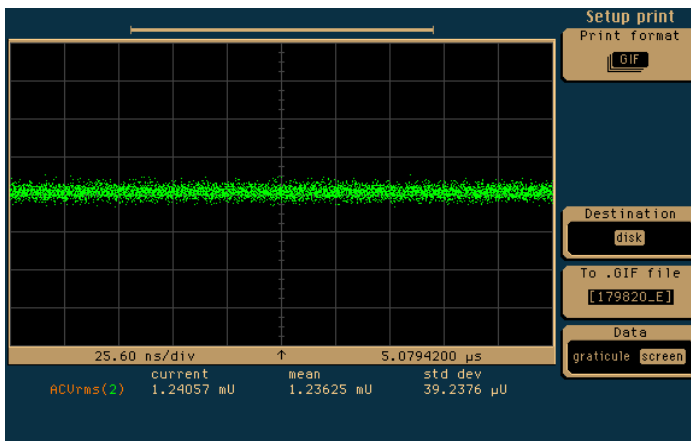
Light Source: Modified WSM-2  
1550nm pulsation light source  
(Graviton Inc.)  
Oscilloscope: 83480A+83485A  
Digital Communications Analyzer  
(Agilent Technology)



**Fig.4 Frequency Response  
Negative Optical Input**

(Calculated from the impulse response shown above)

X-axis: 200MHz / div  
Y-axis: 5dB/electrical / div  
Center Frequency: 1GHz



**Fig.5 Noise Waveform of  
RF Output**

X-axis: 25.6ns / div  
Y-axis: 10mV / div

### DC Performance & Noise Level (with SMF-APC)

Item	Specifications	Measured Value	Judgment
Conversion Gain of RF Out (Pos. In, 1310nm, 50ohm Load)	4.500 to 5.500 V/mW	<b>5.184 V/mW</b>	OK
Conversion Gain of RF Out (Neg. In, 1310nm, 50ohm)	4.500 to 5.500 V/mW	<b>-5.197 V/mW</b>	OK
Gain Difference (P-N) / (P+N)	Within +/- 2%	<b>0.13 %</b>	OK
Monitor Gain of P-Mon. Out (Pos. In, 1310nm, Hi-Z Load)	9.00 to 11.00 V/mW	<b>10.96 V/mW</b>	OK
Monitor Gain of N-Mon. Out (Neg. In, 1310nm, Hi-Z Load)	9.00 to 11.00 V/mW	<b>10.97 V/mW</b>	OK
NEP (at 100MHz, 1310nm)	<6.0pW/ $\sqrt{\text{Hz}}$	<b>3.86 pW/<math>\sqrt{\text{Hz}}</math></b>	OK
NEP (at 500MHz, 1310nm)	<8.5pW/ $\sqrt{\text{Hz}}$	<b>5.20 pW/<math>\sqrt{\text{Hz}}</math></b>	OK
Wideband Noise of RF Out	<1.5mVrms (50ohm)	<b>1.24 mVrms</b>	OK
Wideband Noise of P-Mon. Out	<0.3mVrms (50ohm)	<b>0.24 mVrms</b>	OK
Wideband Noise of N-Mon.	<0.3mVrms (50ohm)	<b>0.24 mVrms</b>	OK
Output Offset Voltage (RF Out)	+/-0.1mV (50 ohm)	<b>-0.01 mV</b>	OK
Output Offset (P-Mon. Out)	+/-0.1mV (Hi-Z)	<b>-0.01 mV</b>	OK
Output Offset (N-Mon. Out)	+/-0.1mV (Hi-Z)	<b>0.01 mV</b>	OK
Supply Current (+24V)	0.11 to 0.13 A	<b>0.12 A</b>	OK

Manufactured on 202x/xx/xx  
Evaluated by Mitsuhiro Nagatomo