



Summary Data For EWDM-2G6G-65-70MV-1

Tested By: Jim Hopson

SO No: _____

Temperature: 0°C TO +85°C

Model No: EWDM-2G6G-65-70MV-1

Date 6/12/2024

Serial No: PL35819/2305

Drawing No: 27637945

Rev: A1

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	2 to 6 GHz	2 to 6 GHz	PMI QA3
2	VSWR:	2.0:1 MAX @ 50 Ω	1.24:1 @ 50 Ω (RF IN) 1.28:1 @ 50 Ω (BIT IN) 1.30:1 @ 50 Ω (RF OUT) 1.36:1 @ 50 Ω (SW OUT)	
3	Noise Figure:	6 dB MAX	4.6 dB	
4	Input Power:	(1) 1 W CW, Max. (2) 100 W Peak @ PW = 1 us & Duty Cycle = 1%, Max.	PASS	
5	TTL Control	See Logic Table	PASS	
6	SP3T Switch Isolation	60 dB MIN (All Ports)	67 dB	
7	SP3T Switching Speed:	100 ns MAX	50 ns	
8	RF OUT Linear Gain	+33 dB MIN, 39 dB MAX	36.7-34.8 db	
9	RF OUT Frequency Flatness:	±2.0 dB MAX	+/- .65 db	
10	RF OUT 1 dB Compression Point:	+3 dBm MIN	10.17 dBm	
11	RF OUT Second Harmonic:	-9 dBc MIN	-30 dBc	
12	RF OUT Third Harmonic:	-12 dBc MIN	-42 dBc	

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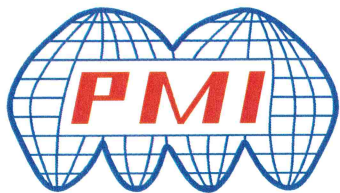
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13	SW Linear Gain	+7 dB MIN, 15 dB MAX	13.8/12.1 db	PMI Q43
14	SW Frequency Flatness:	±1.2 dB MAX	+-.85 db	
15	SW 1 dB Compression Point:	+3 dBm MIN	5.3 dBm	
16	SW Second Harmonic:	-9 dBc MIN	-34 dBc	
17	SW Third Harmonic:	-12 dBc MIN	-37 dBc	
18	VIDEO OUT TSS:	-71 dBm MAX	-71.6 dBm	
19	VIDEO OUT Dynamic Range:	-65 to 0 dBm	-65 to 0 dBm	
20	VIDEO OUT Log Slope Fixed:	70 ± 3mV/dB	69.5 mv	
21	VIDEO OUT Log Linearity:	±0.75 dB MAX @ 4 GHZ	.40/- .28 db	
22	VIDEO OUT Log Accuracy:	±1.25 dB MAX	.89/- .98 db	
23	VIDEO OUT Absolute Log Accuracy:	±1.5 dB MAX	1.2/-1.2 db	
24	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On)	-16 mV	
25	VIDEO OUT Rise Time (10% to 90%):	25 ns TYP 28 ns MAX	23.0 ns	
26	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	144.7 ns	
27	VIDEO OUT Settling Time:	50 ns With in ±70 mV of final value, MAX	40ns	
28	VIDEO OUT Recovery Time:	0.5 us MAX to within 1 dB of baseline	.45us	



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29	VIDEO OUT Video Frequency Flatness:	± 1.0 dB MAX	$\pm .79$ db	PMI Q43
30	VIDEO OUT CW Immunity:	A. CW Immune Power TSS to -40 dBm Baseline Shift: 200 mV MAX	97 mV	
		B. Pulse Peak Amplitude Loss; 2 dB MAX	1 dB	
		CW Immunity Time at CW = -40 dBm, ≤ 4 ms	2.5 ms	
		CW Recovery Time at CW = -40 dBm, ≤ 50 us	40 us	
31	VIDEO OUT Pulse Response, input Signal:	100 ns to 300 us	100 ns to 300 us	
32	VIDEO OUT load Impedance:	$75 \pm 1 \Omega$	75 Ω	
33	VIDEO OUT Video Output driver capability	150 ft. RG11 into 75 ohm load	PASS	
34	Pulse density capability:	10% duty cycle 100ns; 70% duty cycle 300us at peak power -10 dBm with 1 dB variable for pulse amplitude and baseline	PASS	
35	VIDEO OUT Noise Level (Vp-p):	150 mV TYP	100 mv	



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36	Droop of the Output Video Pulse @ 300us & - 65 dBm	70mV (1 dB) MAX	10 mV	PMI QA3
37	VIDEO OUT Propagation Delay:	50 ns MAX Excluding cable	40 ns	
38	Power Supply	+15 V @ 1000 mA MAX -15 V @ 500 mA MAX	+15 V @ 630 mA -15 V @ 140 mA	
39	Power Supply Ripple From DC to 10 MHz	100 mV MAX	PASS	

QA/QC Approval:

K. Luttrell

Date:

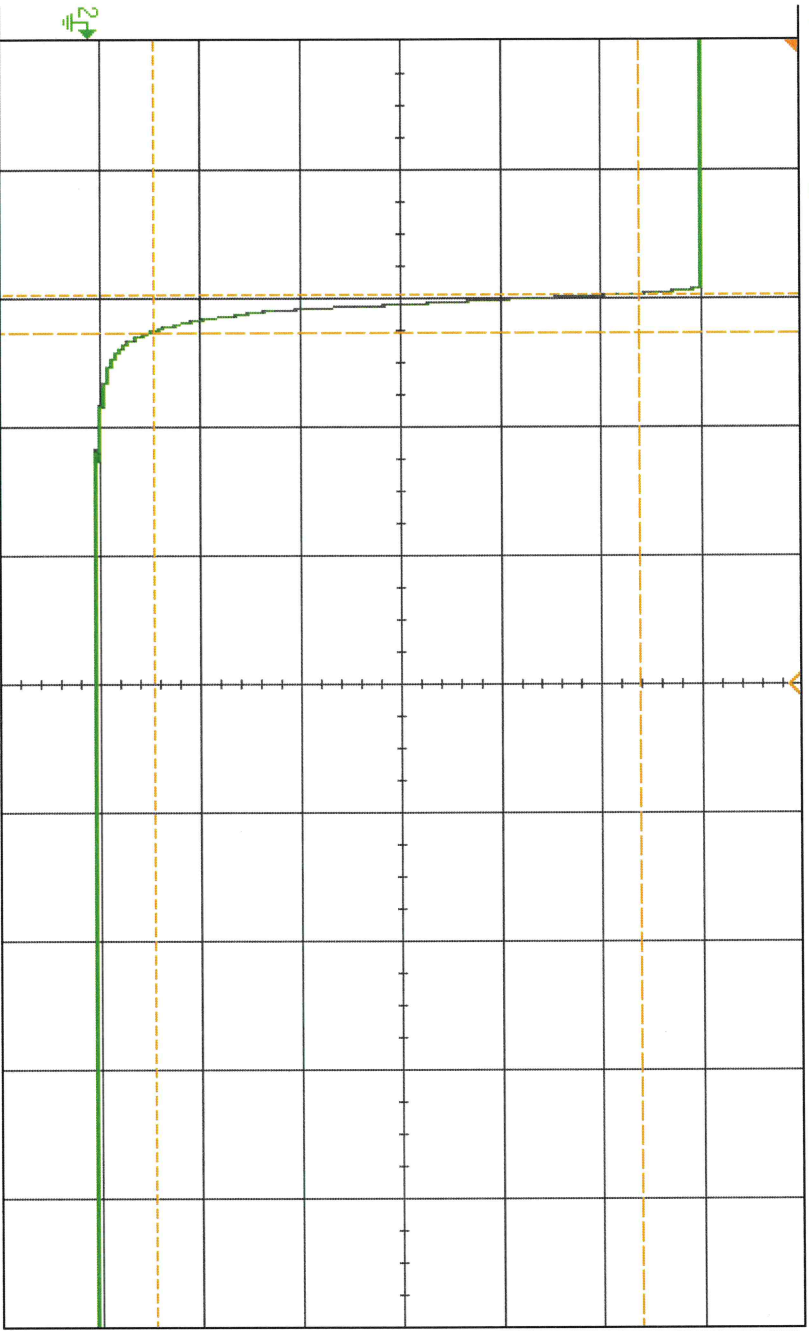
6-14-24

PL35819 Recovery

w 10ps P 50ps

DSO-X 3034A, MY52394003: Tue Jun 11 14:41:51 2024

1 2 800% / 3 4 2.212ms 500.0ns / Auto f E 2.42V



Save to file = pl35819_recovery10

Save

Recall

Default/Erase

Acquisition	
Averaging: 256	
4.00GSa/s	
Channels	
DC	1.00:1
DC	1.00:1
DC	1.00:1
DC	1.00:1
Measurements	
AC RMS - FS(2):	
1.9330V	
Rise(2):	
No edges	
Fall(2):	
145.0ns	

Press to Save

PL35819 Recovery

W 100ps P 300ps

