ELECTRICAL SPECIFICATIONS @ 120VAC 1-phase, 25°C ambient, 50Ω System, MGC mode unless specified otherwise

Parameter	Specifications						Frequency (MHz) & TEST RESULTS									
	Symbol	Min	Typ	Max	Unit	Notes	1000	1250	1500	1750	2000	2250	2500	2750	3000	PASS/FAIL
Operating Frequency Range	BW	1000		3000	MHz	Plot 1	x	x	x	x	x	x	x	x	x	Pass
Output Power (ALC)	dBm	57					57.6	57.5	57.3	57.1	57	57.1	57.2	57.2	56.4	Pass
Sample Port @ P_{OUT} = 57.0 dBm	P_{sample}		0		dBm	Record	8.3	8.6	8.4	8	7.5	7.5	7.6	7.8	7.7	Pass
Power Reporting Accuracy	P_{FWD}			±1.0	dB	Record (see pg3)	x	x	x	x	x	x	x	x	x	Pass
AM Peak Power @ 1dB Gain Compression **Note:** *Measured open loop using MGC; Actual power limited to*	P_{AM}	56			dBm	Record	>57	>57	>57	>57	>57	>57	>57	>57	>57	Pass
Power Gain @ P_Out = 500W	G_{1dB}	57			dB	Record	64.9	65.7	62	61.7	61.5	61.3	57.5	59	57	Pass
Input power for rated P_{OUT}=500W	P_{IN}			5	dbm	Record	-7.3	-8.2	-4.7	-4.6	-4.5	-4.2	-0.3	-1.8	-0.6	Pass
Small Signal Gain Flatness, P_{IN}= -30dBm; MGC Mode	ΔGSS			±3.5	dB	Plot 1	x	x	x	x	x	x	x	x	x	Pass
Leveled ALC Flatness @ P_{OUT}= 500W	ΔALC			±1.0	dB	Plot 2	x	x	x	x	x	x	x	x	x	Pass
Gain Adjustment Range	VVA	20			dB	Plot 4	x	x	x	x	x	x	x	x	x	Pass
Input Return Loss	S_{11}			-10	dB	Plot 3	x	x	x	x	x	x	x	x	x	Pass
Third Order Inter-modulation Distortion 2-Tones @ 51dBm/Tone, 1MHz	IM3		-20		dBc	Record	-29.0	-35.0	-38.0	-36.0	-35.0	-32.0	-26.0	-27.0	-21.0	Pass
Harmonics @ P_{OUT} = 500W	2ND			-10	dBc	Record	-29.0	-20.0	-20.0	-30.0	-45.0	-45.0	-48.0	-50.0	-38.0	Pass
	3RD			-20			-24.0	-35.0	-40.0	-51.0	-38.0	-50.0	-49.0	-54.0	<-70	Pass
Spurious Signals	Spur		-70	-60	dBc	Record	<-70	<-70	<-70	<-70	<-70	<-70	<-70	<-70	<-70	Pass
Switching Time, 1KHz TTL, P_{IN} = 0dBm (ALC MODE)	$T_{ON\ 90\%}$			1	uSec	Record	0.7									Pass
	$T_{OFF\ 10\%}$			1		Record	0.3									Pass
Power Consumption @ Standby	P_{SD}			300	VA	Record	189									Pass
Quiescent Power Consumption	P_{DQ}			500	VA	Record	416									Pass
							2.3	2.3	2.15	2	2.3	2.75	2.77	2.46	2.6	
Power Consumption @ P_{OUT} = 500W	P_D			3000	VA	Record	1726	1934	2142	1934	2205	2101	2205	2142	2246	Pass
Input Overdrive –Shut down	P_{IOD}			10	dBm	Verify	√									Verified / Pass
VSWR Back-Off	VSWR		2:1			Verify	√									Verified / Pass
Thermal Overload - Shutdown	T_{OD}			95	°C	Verify	√									Verified / Pass

Power Reporting Accuracy

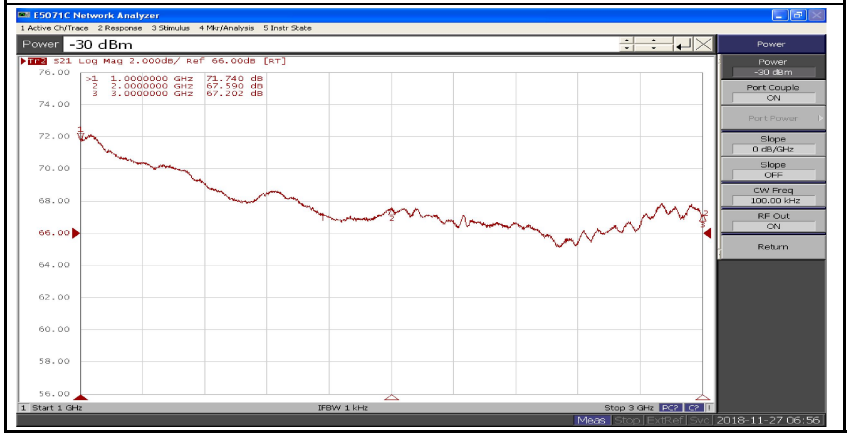
Forward Power, 50 Ohm Load (ALC MODE)							
Frequency (MHz)	**Measuremnt Method**	**ALC set @ 57 dB PIN =0dBm**	**ALC set @ 55 dB PIN =0dBm**	**ALC set @ 47 dB PIN =0dBm**	**ALC set @ 45 dB PIN =0dBm**	**Limits**	**Pass/Fail**
1000	External Test Equipment	57.6	55.6	47.7	45.8	**±1 dB**	**Pass**
	Ethernet Reporting	57	55	47	45		
	Pass/Fail						
2000	External Test Equipment	57	55	47	45	**±1 dB**	**Pass**
	Pass/Fail						
3000	External Test Equipment	56.6	54.8	46.8	45	**±1 dB**	**Pass**
	Pass/Fail	P	P	P	P		

PERFORMANCE PLOTS

Plot 1 - Small Signal Gain

Top Curve: Small Signal Gain @ P_{IN} = -30dBm

Reference: 66dB, 2dB/div.



Plot 2 - Leveled ALC Flatness - 500W

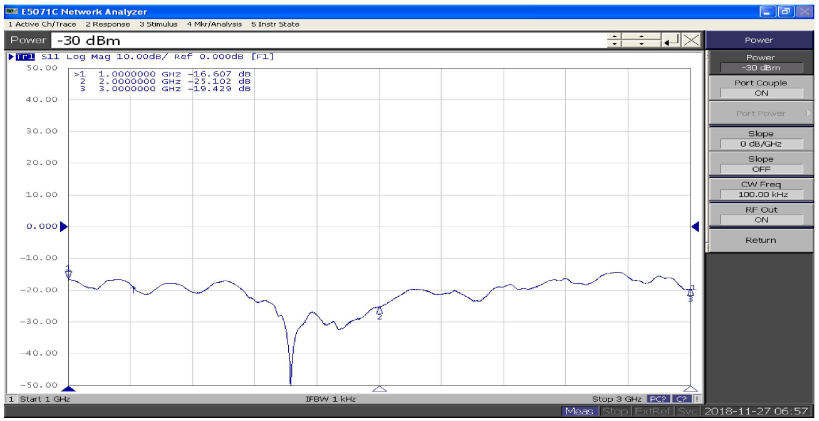
Top Curve: Power Gain @ Constant P_{IN} = 0dBm

Reference: 57dB, 1dB/Div.

Plot 3 - Input Return Loss

Top Curve: Power Gain @ Constant PIN = -30dBm

Reference: 0dB, 10dB/Div.

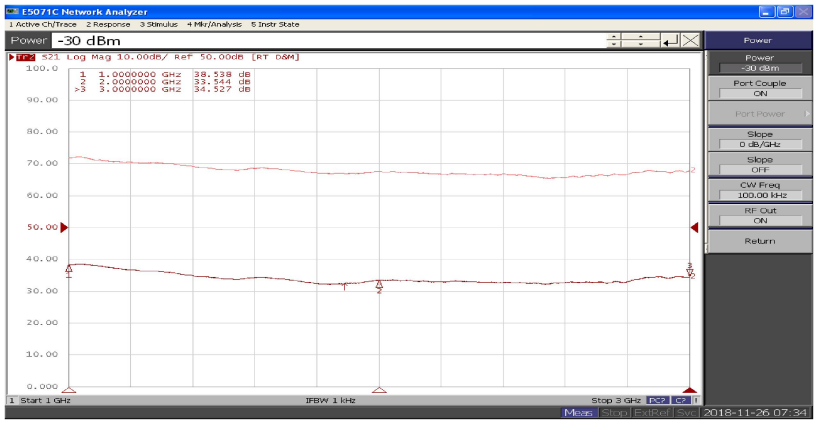


Plot 4- Gain Adjustment @ P_{IN}= -30dBm

Top Curve : Maximum Gain

Bottom Curve: Minimum Gain

Reference: 50dB, 10dB/div.

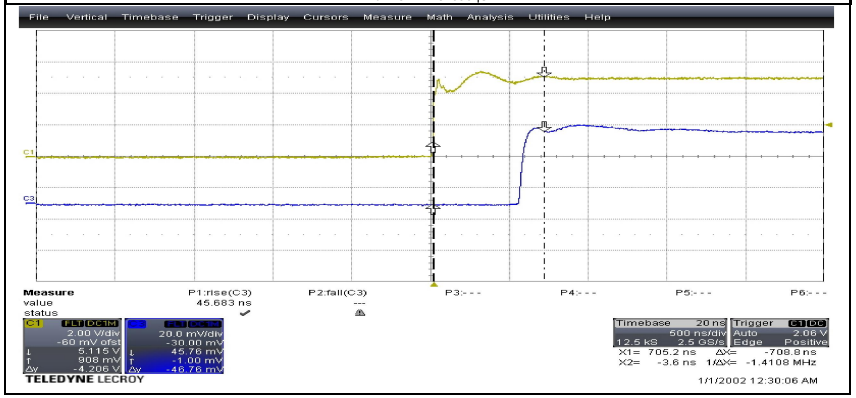


PERFORMANCE PLOTS

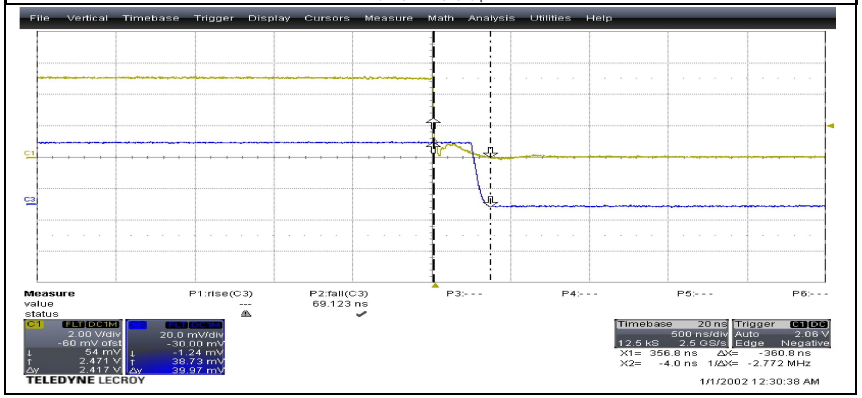
Plot 5 - Switchig On Time @ P_{OUT}= 500 Watts

Top Curve: Gating On (P_{IN} = 0dBm)

Bottom Curve: Output Power Detected Voltage
Horizontal Scale: 0.5µS/Div
Turn On Time: 690ηS



Plot 6 - Switchig Off Time @ POUT= 500 Watts

Top Curve: Gating Off (PIN = 0dBm)

Bottom Curve: Output Power Detected Voltage
Horizontal Scale: 0.5µS/Div
Turn Off Time: 620ηS