

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

Parameter	Specifications						Frequency (MHz) & Test Results											
	Symbol	Min	Typ	Max	Unit	Notes	20	100	200	300	400	500	600	700	800	900	1000	Pass/Fail
Operating Frequency Range	BW	20		1000	MHz	Plot 1 (pg4)	x	x	x	x	x	x	x	x	x	x	x	Pass
Input Frequency Hopping F1=20MHz, F2=300MHz Min. Dwell=20µS (ALC Last Peak Detection mode only)	F ₁₋₂	100			µSec	DVT Only	x	x	x	x	x	x	x	x			x	Pass
Output Power CW @ 900W (into 2:1 VSWR)	P _{out}	59.6			dBm	Record	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6			59.6	Pass
Output Power @1dB G.C.P. (CCDF METHOD)	P _{1dB}	51			dBm	Record	55.0	54.1	54.4	56.3	56.7	56.0	56.8	55.9	56.4	56.0	55.7	Pass
Sample Port @ P _{OUT} = 54.0 dBm	P _{sample}	-5		5	dBm	Record	3.0	3.1	3.4	3.4	3.0	2.6	2.1	2.1	2.1	1.8	1.8	Pass
Input Power for rated P _{OUT} = 250W (CW-MGC MODE minimum VVA attenuation)	P _{IN}			+3	dBm	Record	-5.2	-3.6	-7.2	-8.9	-8.4	-7.5	-7.4	-6.1	-6.5	-7.9	-5.2	Pass
Small Signal Gain Flatness, P _{IN} = -30dBm	ΔG			±3.5	dB	Plot 1 (pg4)	x	x	x	x	x	x	x	x	x	x	x	Pass
Leveled ALC Flatness @ 54dBm	ΔALC			±1.0	dB	Plot 2 (pg4)	x	x	x	x	x	x	x	x	x	x	x	Pass
Gain Adjustment Range	VVA	20			dB	Plot 3 (pg4)	x	x	x	x	x	x	x	x	x	x	x	Pass
Wide band Noise Level, beyond 3MHz from carrier, including phase noise	N _{WIDE}			-50	dBm/kHz	DVT Only	x	x	x	x	x	x	x				x	
RF Noise in transmission mode @ 59.6dB Gain @ 5MHz from carrier, inc phase noise	No			-80	dBm/Hz	DVT Only	x	x	x	x	x	x	x				x	
Inter-modulation (2nd Order) 2-Tones @ 53.6dBm/Tone	IMD _{2nd} Δ=1MHz			-20	dBc	Record	-26.42	-37.09	-42.58	-50.32	-36.84	-32.51	-45.43	-82.43			-84.59	Pass
Inter-modulation (3rd Order) 2-Tones @ 48dBm/Tone	500-520MHz			-25	dBc	Record												
	>520MHz			-60	dBc													
Harmonics @ P _{out} = 200W	3 rd			-10	dBc	Record	-12.1	-13.3	-13.9	-21.2	-23.9	-29.6	-27.8	-36.7	-50.4	-52.3	-60.6	Pass
Out-of-Band Harmonic Distortion Level @ P _{out} = 900W	>500-700MHz			-25	dBc	Record	-75	-57.94	-28.27	-58.79	-27.29	-87.39	-81.06	-86.59			-80	Pass
	>700MHz			-60	dBc		-75	-75	-90.8	-92.11	-89.36	-91.83	-89.3	-91.85			-91.87	
Pulse performance FC = 225MHz, P _{OUT} = 900W(peak) Pulse Period: 100µSec. 50%	T _{RISE 90%}			150	nSec	DVT Only												
Operating Voltage	V _{AC}	100	120	240	Volt	Verify						√						Pass
Power Consumption @ Cold Standby	I _{SD}				VA	Record						124						Pass
Power Consumption @ Hot Standby	I _{SB}				VA	Record						409						Pass
Power Consumption @ P _{OUT} = 500W (ALC mode)	P _D				VA	Record	2520	2176	2313	2036	2520	2988	2618	2727			2831	Fail
Power Consumption @ P _{OUT} = 250W	P _D	1100	1500		VA	Record	1434	1299	1164	1299	1389	1467	1500	1500	1255	1456	1344	Pass
Input Overdrive –Shut down	P _{IOD}			10	dBm	Verify						√						Pass
Thermal Overload –Shut down	T _{SD}			115	°C	DVT Only						√						Pass
Reflected Power Reduction Point (Approx. 3.5:1 VSWR trip point, max reduction -6dB)	VSWR			>3:1	VSWR	Verify						√						Pass

Power Reporting Accuracy

Forward Power, 50 Ohm Load (ALC MODE)							
Frequency (MHz)	Measuremnt Method	PIN =0dBm	PIN =0dBm	PIN =0dBm	PIN =0dBm	Limits	P/F
20	External Test Equipment	54.4	50.6	45.6	40.7	±1 dB	Pass
	Ethernet Reporting	54	50	45	40		
	Pass/Fail						
500	External Test Equipment	54.2	50.1	45.1	40.2	±1dB	Pass
	Pass/Fail						
1000	External Test Equipment	54.2	50.2	45.2	40.2	±1 dB	Pass
	Pass/Fail	P	P	P	P		

PERFORMANCE PLOTS

