



PLANAR MONOLITHICS INDUSTRIES, INC.
 7311-G GROVE RD., FREDERICK MD.21704
 TEL: 301-631-1579 FAX: 301-662-2029
 URL: WWW.PLANARMONOLITHICS.COM
 E-MAIL: SALES@PLANARMONOLITHICS.COM
 ISO 9001:2000 CERTIFIED

FORM: RFOC-SS-DTA
 DATE: 4-19-06

ACCEPTANCE TEST DATA SHEET (@25°C)
 ON

RF OSCILLATOR COMPONENT CONSOLIDATION / RF SUB-ASSEMBLY

CUSTOMER: _____
 JOB NO: _____
 MODEL NO: RFOC-811-QRC
 SERIAL NO: PM602930

ENGINEER: Yu Rong
 CUSTOMER PN: 4500671963
 OPTION NO: _____
 FREQUENCY RANGE: 8 TO 11 GHz

PARAMETERS TO BE TESTED			SPECIFIED (25°C only)		MEASURED		NOTES
FREQUENCY			8 TO 11 GHz				
Selected Path Gain/Loss	Input Port	Output Port	Min.	Max.	Calibration @-40dBm		
	J1005	J1014	3dB	-	6.3 to 9.3		Set AT8 to min. and SW8 ON
	J1005	J1007	6dB	20dB	11.9 to 14.0		Set SW2 ON
	J1013	J1014	10dB	23dB	15.7 to 18.8		SET AT2 TO MIN. SET AT7 AND AT8 TO MAX. SET SW7 AND SW8 OFF
	J1013	J1014	0dB	13dB	5.95 to 8.48		SET AT2 TO MAX. SET AT7 AND AT8 MIN. SET SW7 AND SW8 ON
	J1013	J1007	3dB	16dB	12.3 to 14.1		SET AT7 TO MINI AND SET SW7 ON
	J1006	J1015	-	-10dB	-4.9 to -3.8		SET AT1 TO MIN., SET SW1, K1 TO ON
	J1006	J1012	3dB	20dB	10.2 to 12.8		SET AT1 TO MIN., SET SW1 TO ON, SET K1 TO OFF
	J1016	J1012	3dB	20dB	11.6 to 13.9		SET AT6 TO MIN. AND SET SW6 TO ON
	J1017	J1012	3dB	20dB	12.0 to 14.0		SET AT3 TO MIN. AND SW3 TO ON
	J1011	J1012	3dB	20dB	11.7 to 13.8		SET AT5 TO MIN. AND SW5 TO ON
	J1008	J1009	6dB	16dB	14.5 to 16.5		SET AT4 TO MIN. AND SW4 TO ON
J1008	J1010	9dB	19dB	18.0 to 19.0			
Output Ports			Min. (dBm)	Max. (dBm)	Min (dBm)	Max (dBm)	
J1007			11.65	11.65	+19	+20	SET SW2, SW7, SW8 ON
J1014			-50.0	+6.92	<-78	>+13.7	
J1015			-50.0	+5.0	-55.8	+10.0	SET SW1 ON, SET K1 SWITCHED TO J1015
J1012			-60.0	+13	<-78	>+23.2	SET K1, SW1, SW5, SW6 OFF, SET SW3 ON
J1009			-60.0	-0.35	<-78	+4.36	SET SW4 ON



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		J1010		-45.35	+4.65	-46.0	+8.3		
		Input	Output	Min.	Goal	Measured (min)			
Isolation	J1013	J1012	J1012	55dB	70dB	72.8dB		Calibration @+5dBm and IFBW of 3KHz.	
		J1009	J1009	55dB	70dB	82.1dB			
		J1010	J1010	55dB	70dB	80.1dB			
	J1008	J1012	J1012	55dB	70dB	80.3dB			
		J1014	J1014	55dB	70dB	68.0dB			
	J1005	J1012	J1012	55dB	70dB	65.0dB			
		J1009	J1009	55dB	70dB	74.2dB			
		J1010	J1010	55dB	70dB	76.5dB			
	J1016	J1014	J1014	55dB	70dB	77.8dB			
		J1009	J1009	55dB	70dB	83.6dB			
	J1012	J1014	J1014	55dB	70dB	81.2dB			
		J1010	J1010	55dB	70dB	82.1dB			
J1011	J1014	J1014	55dB	70dB	72.9dB				
	J1010	J1010	55dB	70dB	80.2dB				
VSWR	INPUTS	J1005		2.0:1		1.68:1		NOT REQUIRED FOR ACCEPTANCE TEST REPORT	
		J1013		2.0:1		1.69:1			
		J1006		2.0:1		1.44:1			
		J1016		2.0:1		1.47:1			
		J1017		2.0:1		1.58:1			
		J1011		2.0:1		1.80:1			
	OUTPUTS	J1008		2.0:1		1.19:1			
		J1007		2.5:1		1.34:1			
		J1014		2.5:1		1.93:1			
		J1015		2.5:1		1.50:1			
		J1012		2.5:1		1.49:1			
		J1009		2.5:1		1.49:1			
		J1010		2.5:1		1.52:1			
Throughput delay	RF Paths								
	J1008	J1009		10ns		2.41ns			
	J1008	J1010		10ns		2.31ns			
	J1006	J1012		10ns		3.46ns			
	J1006	J1015		10ns		1.88ns			
	J1011	J1012		10ns		2.35ns			
	J1017	J1012		10ns		2.35ns			
	J1016	J1012		10ns		2.39ns			
	J1013	J1014		10ns		3.28ns			AT2,AR3 PATH
	J1013	J1014		10ns		4.48ns			AT7,AT8 PATH
	J1013	J1007		10ns		1.95ns			
	J1005	J1014		10ns		4.84ns			
J1005	J1007		10ns		2.57ns				
SWITCH ON/OFF	SWITCH		ON (ns)	OFF (ns)	ON (ns)	OFF (ns)			
	SW1		50	50	16	40.3			
	SW2		50	50	11.8	39.8			
	SW3		50	50	12.4	47			
	SW4		50	50	15.4	26			



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	SW5	50	50	12.3	48.3	
	SW6	50	50	12.4	45	
	SW7	50	50	12.1	39.3	
	SW8	50	50	17.0	27.8	
ATTENUATOR ON/OFF	ATTENUATOR	Rise (μ s)	Fall (ns)	Rise (μ s)	Fall (ns)	
	AT1	1.6	100	1.56	24.4	
	AT2	1.6	100	1.20	33.2	
	AT3	1.6	100	1.56	18.3	
	AT4	1.6	100	1.56	19.0	
	AT5	1.6	100	1.56	23.0	
	AT6	1.6	100	1.56	19.0	
	AT7	1.6	100	1.56	32.5	
	AT8	1.6	100	1.59	16.2	
DEPTH OF MODULATION	DEVICE	Minimum		Measured (min)		Calibration
	K1	60dB		78.7		@+5dBm; IFBW: 3kHz
	AT1	50dB		58.7		
	AT2	50dB		58.6		@-20dBm; IFBW: 3kHz
	AT3	50dB		59.2		
	AT4	50dB		60.0		
	AT5	50dB		59.0		
	AT6	50dB		58.7		
	AT7	40dB		57.3		
	AT8	50dB		60.5		
	SW1	60dB		81.5		@+5dBm; IFBW: 3kHz
	SW2	60dB		81.2		
	SW3	60dB		78.6		
	SW4	60dB		82.7		
	SW5	60dB		83.6		
	SW6	60dB		85.3		
	SW7	50dB		82.4		
SW8	60dB		82.3			
SWITCH CONTROL LOGIC	TTL "0"	ON		ON		NOT REQUIRED FOR ACCEPTANCE TEST
	TTL "1"	OFF		OFF		
ATTENUATOR CONTROL VOLTAGE	VOLTAGE RANGE	0 TO 6v		0 to 6V		
	TRANSFER FUNCTION	10dB/V		10dB/V		
DC POWER	Voltages	Max.				*No connections to any ports. Unit standing alone
	+5V	5.0A		0.306A*		
	+15V	3.0A		0.740A*		
	-15V	3.0A		0.432A*		
	+28V	1.0A		0.080A		

TEST ON: HP8720C Network Analyzer, E4407B Spectrum Analyzer, Gigatronics 8541
 Universal Power Meter, Tektronix TDS3014B

QA/QC APPROVAL: _____

Q4

DATED: _____

4/19/06