


	Cage Code:	Title:	Date:	Rev:	Model no:
	02WLO	PRODUCT DATA (subject to change)	11/23/2009	None	UH20-238
(15H04168-01)					

This document describes the performance of a high power 1P2T switch. This is a normally cold-switched design i.e.; switched while RF is off. See section 1.6 for hot switching impact and derating. Sections 1.6.1 thru 1.6.3 are untested estimates only.

This is a reflective full power design. i.e., the range of power conditions in section 1 will be tolerated at the “off” port.

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
1	POWER SPECIFICATION	IN BAND				
1.1	FREQUENCY		200	1000	MHz	
1.2	PEAK POWER	ABSOLUTE MAX including load effects		1000	WATTS	
1.3	PULSE WIDTH			75	uS	
1.4	DUTY			35	%	
1.5	AVERAGE POWER	ABSOLUTE MAX including load effects		350	WATTS	
1.6	HOT SWITCHING	SWITCHING RATE				Note: VSWR, loss, Spurious and video leakage will be random during hot switching
1.6.1	Maximum peak power	1 KHz MAX		250	WATTS	75 uS max, 35% DUTY
1.6.2	Maximum peak power	2 KHz MAX		125	WATTS	75 uS max, 35% DUTY
1.6.3	Maximum peak power	4 KHz MAX		62	WATTS	75 uS max, 35% DUTY
2	POWER SPECIFICATIONS	GUARD BAND				
2.1	FREQUENCY		1000	1090	MHz	
2.2	PEAK POWER			10	WATTS	
2.3	PULSE WIDTH		CW		μS	
2.4	DUTY		CW		%	
2.5	CW POWER			10	WATTS	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY		>1090		MHz	
3.2	PEAK POWER			30	dBm	
3.3	PULSE WIDTH			CW	μS	
3.4	DUTY			CW	%	
3.5	CW POWER			30	dBm	
4	OPERATING FREQUENCY		200	1000	MHz	
5	INSERTION LOSS					
5.1				0.8	dB	
6	ISOLATION					
6.1			40		dB	
7	PHASE					

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7.1	MATCHING					NOT SPECIFIED
7.2	TRACKING					NOT SPECIFIED
8	VSWR					
8.1	PORT SELECTED			1.5:1		Over 80% of band
8.2	PORT NOT SELECTED			>20:1		INFINITY
8.3	LOAD			2.5:1		
9	HARMONICS & SPURS					
9.1	INTERNALLY GENERATED			-50	dBc	
9.2		MEASURED AT INCIDENT POWER		0	dBm	
10	SWITCHING					
10.1	SPEED	TO 0.50DB I.L.		4	μS	
10.2	SWITCHING RATE	COLD SWITCHING		10	KHz	
10.3	VIDEO LEAKAGE			20	Vpp	MEASURED INTO 50 OHMS
10.4	COMMAND LOGIC	RS-422				CONTROL AND BIT
10.5	LOGIC TABLE					SEE DWG 3454 (below)
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE 1		4.80	5.20	VDC	
11.2	POSITIVE BIAS VOLTAGE 2		26	32	VDC	
11.3	POSITIVE BIAS CURRENT 1			1.0	A	
11.4	POSITIVE BIAS CURRENT 2			0.5	A	
11.5	NOTE 1: Power on sequence - To prevent possible damage to the switch, the + 5V should be applied first, then the +28V.					
11.6	NOTE 2: Voltage Protection – This unit does not have over-voltage or reverse polarity protection on any bias port.					
12	CONNECTORS					
12.1	RF					NF
12.2	DC					DCM-25
13	MECHANICAL					
13.1	WEIGHT			5.5	LBS	
13.2	OUTLINE					SEE DWG 3454 (below)
14	ENVIRONMENTAL					
14.1	OPERATING TEMPERATURE		-25	+70	°C	
14.2	STORAGE TEMPERATURE		-40	+70	°C	
14.3	VIBRATION LEVEL					GROUND TRANSPORT



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