This document describes the performance of a high power 1P2T switch. This is a cold switched design i.e.; switched while RF is off. Proper bias levels must be applied when operating this device.

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
1	POWER SPECIFICATION	IN BAND				
1.1	FREQUENCY		100	512	MHz	
1.2	PEAK POWER			1600	Watts	Into 1.1:1 load
1.2.1	PEAK POWER			1400	Watts	Into 2.5:1 load
1.3	PULSE WIDTH			CW		
1.4	DUTY			CW		
1.5	CW POWER			1600	Watts	Into 1.1:1 load
2	POWER SPECIFICATIONS	GUARD BAND				
2.1	FREQUENCY		512	550	MHz	
2.2	PEAK POWER			7.5	Watts	
2.3	PULSE WIDTH		CW			
2.4	DUTY		CW			
2.5	CW POWER			7.5	Watts	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY			>550	MHz	
3.2	PEAK POWER			30	dBm	
3.3	PULSE WIDTH			CW		
3.4	DUTY			CW		
3.5	CW POWER			30	dBm	
4	OPERATING FREQUENCY		100	512	MHz	
5	INSERTION LOSS					
5.1	XMT	100-512 MHz		0.45	dB	
5.2	RCV	20-512 MHz		1.00	dB	
6	ISOLATION					
6.1	XMT		55		dB	
6.2	RCV		30		dB	
7	PHASE					
7.1	MATCHING					NOT SPECIFIED
7.2	TRACKING					NOT SPECIFIED

	Cage Code:	Title:	Date:	Rev:	Model no:
COMTECH PST	02WLO	PRODUCT DATA	3/21/06	N/A	UH21-205
Hill Engineering Division		(subject to change)			

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
8	VSWR					
8.1	PORTS NOT SELECTED					INFINITE
8	VSWR (CONT.)					
8.2	INPUT & OUTPUT, SELECTED PORTS			1.5:1		
8.3	TERMINATION			1.1:1		At 1600 W input
8.3.1	TERMINATION			2.5:1		At 1400 W input
8.4	SOURCE			1.25:1		
9	HARMONICS & SPURS	Internally generated		-120	dBm	From 10 KHz to 1 GHz
10	SWITCHING					
10.1	SPEED	50% TTL TO 90% RF		30	us	
10.2	SWITCHING RATE			2	kHz	
10.3	COMMAND LOGIC	RS-422				
10.4	VIDEO LEAKAGE			25	Vpp	
10.4	LOGIC TABLE					SEE DWG below
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE 1		4.8	5.4	VDC	
11.2	POSITIVE BIAS VOLTAGE 2			28	VDC	
11.4	POSITIVE BIAS CURRENT 1			700	mA	
11.5	POSITIVE BIAS CURRENT 2			1000	mA	
11.6	VOLTAGE PROTECTION					THIS UNIT DOES NOT HAVE OVERVOLTAGE OR REVERSE POLARITY PROTECTION ON ANY BIAS PORT
11.7	POWER ON SEQUENCE					TO PREVENT DAMAGE TO THE UNIT, APPLY THE +5VDC FIRST, THEN APPLY THE +28VDC
12	CONNECTORS					
12.1	RF	XMT				SCF
12.2	RF	RCV				SMAF
12.3	DC					25 pin D submin
13	MECHANICAL					
13.1	WEIGHT			4.5	Lbs.	
13.2	OUTLINE					SEE DWG below
14	ENVIRONMENTAL					
14.1	OPERATING		0	+60	°C	
	TEMPERATURE					
14.2	STORAGE TEMPERATURE		-20	+55	°C	
14.3	VIBRATION LEVEL					Ground Transport
15	ESS SCREENING					48 Hrs B/I



