COMTECH PST Hill Engineering Division	Cage Code: 02WLO	Title: PRODUCT DATA (subject to change)	Date: 2/14/00	Rev: None		Model no: UH20-028

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		245	340	MHz	
1.2	PEAK POWER			2000	Watts	
1.3	PULSE WIDTH			10	mS	MILLISECONDS
1.4	DUTY			10	%	
1.5	CW POWER			200	Watts	
2	POWER SPECIFICATIONS	GUARD BAND				
2.1	FREQUENCY		340	450	MHz	
2.2	PEAK POWER			100	Watts	
2.3	PULSE WIDTH		CW		µS	
2.4	DUTY		CW		%	
2.5	CW POWER			100	Watts	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY			>450	MHz	
3.2	PEAK POWER			38	dBm	
3.3	PULSE WIDTH			65	µS	
3.4	DUTY			10	%	
3.5	CW POWER			28	dBm	
4	OPERATING FREQUENCY		245	340	MHz	
5	INSERTION LOSS					
5.1				0.3	dB	
6	ISOLATION					
6.1	INPUT TO OUTPUT		63		dB	
6.2	OUTPUT TO OUTPUT		63		dB	
7	PHASE					
7.1	MATCHING					NOT SPECIFIED
7.2	TRACKING					NOT SPECIFIED
8	VSWR					
8.1	PORTS NOT SELECTED					INFINITE

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
8	VSWR (CONT.)					
8.2	INPUT & OUTPUT, SELECTED PORTS			1.5:1	-	
8.3	TERMINATION			1.5:1	-	
8.4	SOURCE			1.15:1	-	
9	HARMONICS & SPURS					
9.1	INTERNALLY GENERATED					NOT SPECIFIED
9.2	MEASURED AT INCIDENT POWER					NOT SPECIFIED
10	SWITCHING					
10.1	SPEED	50% TTL TO 90% RF		50	uS	
10.2	SWITCHING RATE			2	kHz	
10.3	COMMAND LOGIC	RS-422				
10.4	VIDEO LEAKAGE			15	Vpp	
10.4	LOGIC TABLE					SEE DWG 2611
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE		7.25	8	VDC	
11.2	NEGATIVE BIAS VOLTAGE			-400	VDC	
11.4	POSITIVE BIAS CURRENT			2000	mA	
11.5	NEGATIVE BIAS CURRENT			30	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 POSSIBLE DAMAGE TO THE UNIT, THE +7.5VDC SHOULD BE APPLIED FIRST, THEN APPLY THE –400V
12	CONNECTORS					
12.1	RF					NF
12.3	DC					DCM-37
13	MECHANICAL					
13.1	WEIGHT			4	Lbs.	
13.2	OUTLINE					SEE DWG 2611
14	ENVIRONMENTAL					
14.1	OPERATING TEMPERATURE		0	+60	^{o}C	
14.2	STORAGE TEMPERATURE		-20	+55	^{o}C	
14.3	VIBRATION LEVEL					GROUND TRANSPORT
14.4	MAGNETIC FIELD					THIS SWITCH IS DESIGNED USING NON-MAGNETIC PARTS. IT WILL BE APPLIED IN A HIGH INTENSITY MAGNETIC FIELD.
15	ESS SCREENING					QP-121 LEVEL 2

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