COMTECH PST	Cage Code:	Title:	Date:	Rev:	Model no:
Hill Engineering Division		PRODUCT DATA	3/27/00	N/A	VH40-082
		(subject to change)			

This document describes the performance of a high power 1P4T switch. This is a cold switched design i. e; switched while RF is off. Proper bias levels per item no. 11 must be applied when operating this device.

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
1	POWER SPECIFICATION	IN BAND				
1.1	FREQUENCY		20	110	MHz	
1.2	PEAK POWER, CW			1400	Watts	See 8.3 below
2	POWER SPECIFICATIONS	GUARD BAND				
2.1	FREQUENCY		110	180	MHz	
2.2	PEAK POWER			10	Watts	
2.3	PULSE WIDTH			100	mS	
2.4	DUTY			10	%	
2.5	CW POWER			1	Watts	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY			>180	MHz	
3.2	PEAK POWER			1	Watt	
3.3	PULSE WIDTH				CW	
3.4	DUTY				CW	
3.5	CW POWER			1	Watt	
4	OPERATING FREQUENCY		20	110	MHz	
5	INSERTION LOSS			0.2	dB	
6	ISOLATION					
6.1		Input To Output	50		dB	
6.2		Output To Output	50		dB	
7	PHASE					
7.1	MATCHING					NOT SPECIFIED
7.2	PHASE TRACKING					NOT SPECIFIED
8	VSWR					
8.1	INPUT			1.20:1		
8.2	OUTPUT			1.20:1		
8.3	TERMINATION			2.5:1		
8.4	PORTS NOT SELECTED			~		INFINITY
L			1	1	1	



ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
9	HARMONICS & SPURS					
9.1	INTERNALLY GENERATED			-70	dBc	
9.2		MEASURED AT		0	dBm	
		INCIDENT POWER				
10	SWITCHING					
10.1	SPEED	50% TTL to 90% RF		30	μS	
		Signal			•	
10.2	SWITCHING RATE			2	KHz	
10.3	VIDEO LEAKAGE			40	Vpp	DC to 1 GHz
10.4	COMMAND LOGIC	RS-422				
10.5	LOGIC TABLE					SEE DWG below
11	D.C. POWER					
11.1	POSITIVE 1 BIAS VOLTAGE		7.25	7.75	VDC	
11.2	POSITIVE 2 BIAS VOLTAGE		4.85	5.25	VDC	
11.3	POSITIVE 3 BIAS VOLTAGE		26	30	VDC	
11.4	POSITIVE 1 BIAS CURRENT			1200	mA	
11.5	POSITIVE 2 BIAS CURRENT			1000	mA	
11.6	POSITIVE 3 BIAS CURRENT			1200	mA	
11.7	VOLTAGE PROTECTION					THIS UNIT DOES NOT HAVE OVERVOLTAGE OR REVERSE POLARITY PROTECTION ON ANY BIAS PORT
10	00111507000					
12	CONNECTORS					
12.1	RF					NF
12.2	DC					DAM-25
13	MECHANICAL					
13.1	WEIGHT			6	lbs.	
13.2	OUTLINE	MAX ENV. 6X9X4.2"				DWG below
14	ENVIRONMENTAL	SHELTERED				
14.1	OPERATING TEMPERATURE		0	+60	°C	
14.2	STORAGE TEMPERATURE		-20	+55	°C	
14.3	VIBRATION LEVEL	GND TRANSPORT				Ground Transport
14.4	DEVICE SCREENING	LEVEL 2				QP-121 LEVEL 2



Cage Code: 02WLO

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PRODUCT DATA

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3/27/00

N/A

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