	Cage Code:	Title:	Date:	Rev:	Model no:
HILL INDIDATING LIVERIEN	02WL0	PRODUCT DATA	09/15/05	N/A	VH20-148
		(subject to change)			

This document describes the performance of a high power 1P2T/TR switch. This is a cold-switched design i.e.; switched while RF is off. Proper bias per section 11 must be applied before operating this switch.

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
1	POWER SPECIFICATION	IN BAND				
1.1	FREQUENCY		30	400	MHz	
1.2	PEAK POWER	ABSOLUTE MAX. AT INPUT, TRANSMIT		1200	WATTS	SEE 8.3, BELOW
1.3	CW POWER			1200	WATTS	
1.4	RECEIVE POWER			1	WATT	
2	POWER SPECIFICATIONS	GUARD BAND				
2.1	FREQUENCY		400	440	MHz	
2.2	PEAK POWER			50	WATTS	
2.3	PULSE WIDTH		CW		μS	
2.4	DUTY		CW		%	
2.5	CW POWER			50	WATTS	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY		>440		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		30	400	MHz	
5	INSERTION LOSS	TRANSMIT		0.4	dB	
5.1		RECEIVE		0.5	dB	
6	ISOLATION					
6.1	TRANSMIT		50		dB	
6.2	RECEIVE		40		dB	
7	PHASE	MATCH/TRACK				NOT SPECIFIED
8	VSWR					
8.1	PORT SELECTED			1.4:1		
8.2	PORT NOT SELECTED			>20:1		INFINITY
8.3	LOAD			2.0:1		
8.4	SOURCE			1.15:1		

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			1			
ITEM	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
NO 9	HARMONICS & SPURS					
_				70	-ID-	
9.1	INTERNALLY GENERATED	MEAGURERAT		-70	dBc	
9.2		MEASURED AT INCIDENT POWER		0	dBm	
10	SWITCHING					
10.1	SPEED	TO 0.50DB I.L.		50	μS	
10.2	SWITCHING RATE			2	KHz	
10.3	VIDEO LEAKAGE			40	Vpp	DC TO 1 GHz
10.4	COMMAND LOGIC	RS-422				CONTROL AND BIT
10.6	LOGIC TABLE					SEE DWG BELOW
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE		4.80	5.20	VDC	
11.2	NEGATIVE BIAS VOLTAGE		390	410	VDC	
11.3	POSITIVE BIAS CURRENT			2.5	А	
11.4	NEGATIVE BIAS CURRENT			1.2	А	
11.5	11.5 NOTE : Voltage Protection – This unit does not have over-voltage or reverse polarity protection on any bias port.					
12	CONNECTORS					
12.1	RF	INPUT & XMIT				NF
12.3	DC					25 PIN D SUBMIN
13	MECHANICAL					
13.1	WEIGHT			5.3	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

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