	Cage Code:	Title:	Date:	Rev:	Model no:
Hill Engineering Division	02WLO	PRODUCT DATA (subject to change)	11/11/2009	None	AB-057
(15H03798-01)					

This document describes the performance a high power 2P2T 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, SELECTED PORT				
1.1	FREQUENCY		1.25	1.35	GHz	
1.2	PEAK POWER			2000	WATTS	
1.3	PULSE WIDTH			100	μs	
1.4	DUTY			5	%	
1.5	AVERAGE POWER			100	WATTS	
2	POWER SPECIFICATIONS	GUARD BAND, SELECTED PORT				
2.1	FREQUENCY		1.35	1.8	GHz	
2.2	PEAK POWER			100	WATTS	
2.3	PULSE WIDTH			100	μs	
2.4	DUTY			5	%	
2.5	CW POWER			5	WATTS	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY		>1.8		GHz	
3.2	PEAK POWER			1.0	WATTS	
3.3	PULSE WIDTH		CW		μs	
3.4	DUTY		CW		%	
3.5	CW POWER			1.0	WATTS	
4	OPERATING FREQUENCY		1.25	1.35	GHz	
5	INSERTION LOSS					
5.1				0.9	dB	
6	ISOLATION					
6.1	INPUT TO OUTPUT		35		dB	
6.2	OUTPUT TO OUTPUT		35		dB	
7	PHASE					
7.1	MATCHING					NOT SPECIFIED
7.2	TRACKING					NOT SPECIFIED
8	VSWR					
8.1	SELECTED PORTS			1.4:1		

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
8	VSWR (CONT.)					
8.2	PORTS NOT SELECTED					INFINITE
8.3	LOAD			1.8:1		
8.4	SOURCE			1.5:1		
9	HARMONICS & SPURS					
9.1	INTERNALLY GENERATED					NOT SPECIFIED
10	SWITCHING					
10.1	SPEED	50% LOGIC TO 0.5dB I.L.		1	μs	
10.2	SWITCHING RATE			50	kHz	
10.3	COMMAND LOGIC	RS-422				SEE NOTE 1
10.4	VIDEO LEAKAGE					NOT SPECIFIED
10.4	LOGIC TABLE					SEE DWG 3275 (below)
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE		4.8	5.2	VDC	SEE NOTE 2
11.2	NEGATIVE BIAS VOLTAGE		-66	-74	VDC	SEE NOTE 3
11.4	POSITIVE BIAS CURRENT			500	mA	
11.5	NEGATIVE BIAS CURRENT			10	mA	SEE NOTE 4

NOTE 1: USE DS26LS31 OR EQUIVALENT LINE DRIVER.

NOTE 2: NO REVERSE POLARITY PROTECTION IS PROVIDED ON THE POSITIVE RAIL. OVERVOLTAGE PROTECTION IS INCLUDED ON THE POSITIVE RAIL

NOTE 3: REVERSE POLARITY AND OVERVOLTAGE PROTECTION IS PROVIDED ON THE NEGATIVE RAIL.

NOTE 4: 10mA IS STEADY STATE RATING. 40mA REQUIRED FOR 50kHz OPERATION

12	CONNECTORS				
12.1	RF				SMAF
12.3	DC				DEMM-9P
13	MECHANICAL				
13.1	WEIGHT		24	Oz.	
13.2	OUTLINE				SEE DWG (below)
14	ENVIRONMENTAL				
14.1	OPERATING TEMPERATURE	-50	+70	°C	
14.2	STORAGE TEMPERATURE	-55	+85	°C	
14.3	VIBRATION LEVEL				SHELTERED GROUND MOBILE

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