	Cage Code:	Title:	Date:	Rev:	Model no:
Hill Engineering Division	02WLO	PRODUCT DATA	1/2/03	None	M22-082
		(subject to change)			

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 per item no. 11 must be applied when operating this device. This device must be properly heat sunk to insure reliable operation.

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
1	POWER SPECIFICATION	IN BAND				
1.1	FREQUENCY		2.0	4.0	GHz	
1.2	PEAK POWER			300	WATTS	
1.3	PULSE WIDTH			10	μSEC	
1.4	DUTY			13	%	
1.5	AVG POWER			40	WATTS	
1.6	CW POWER			40	WATTS	
2	POWER SPECIFICATIONS	GUARD BAND				
2.1	FREQUENCY		4.0	4.5	GHz	
2.2	PEAK POWER			5	WATTS	
2.3	PULSE WIDTH			10	μSEC	
2.4	DUTY			15	%	
2.5	AVG or CW POWER			0.75	WATTS	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY			>4.5	GHz	
3.2	PEAK POWER			0.10	WATTS	
3.3	PULSE WIDTH			CW	μSEC	
3.4	DUTY			CW	%	
3.5	AVG or CW POWER			0.10	WATTS	
4	OPERATING FREQUENCY		2	4	GHz	
5	INSERTION LOSS			0.75	dB	
6	ISOLATION	Input/Output	50		dB	
6.1		Output/Output	50		dB	
7	PHASE					
7.1	ABSOLUTE MATCHING					NOT SPECIFIED
7.2	PHASE TRACKING					NOT SPECIFIED
8	VSWR					
8.1	INPUT & OUTPUT	SELECTED PORTS		1.8:1		
8.2	OUTPUT	PORTS NOT SELECTED				INFINITY
8.3	SOURCE AND TERMINATION			1.4:1		



ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
9	RESERVED					
10	SWITCHING					
10.1	TRANSITION TIME	10% FALLING EDGE OF OFF GOING RF PATH TO 90% OF RISING EDGE OF ON GOING RF PATH		150	nSEC	
10.2	SWITCHING RATE			500	kHz	
10.3	VIDEO LEAKAGE				Vpp	NOT SPECIFIED
10.4	COMMAND LOGIC TYPE	TTL				
10.5	LOGIC TABLE					SEE OUTLINE DWG 3502
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE	NOMINAL	4.8	5.2	VDC	
11.2	NEGATIVE BIAS VOLTAGE		-26	-32	VDC	
11.3	POSTIVE BIAS CURRENT	SELECTED ARM		+200	mA	
11.4	NEGATIVE BIAS CURRENT	NOMINAL PER CHANNEL		-60	mA	
12	CONNECTORS & INTERFACE					
12.1	RF					SMA Female
12.2	POWER/LOGIC					SOLDER PINS
13	MECHANICAL					
13.1	WEIGHT			5	OZ	
13.2	OUTLINE					SEE DWG 3502
14	ENVIRONMENTAL					
14.1	OPERATING TEMPERATURE		-0	+60	°C	
14.2	STORAGE TEMPERATURE		-20	+60	°C	
14.3	VIBRATION LEVEL					GROUND TRANSPORTATION
14.4	SCREENING					COMMERCIAL, QP-121, LVL 1



Cage Code: 02WLO

Title:

PRODUCT DATA

Date: Rev:

1/2/03 None

Model no:

M22-082

(subject to change)

