

	Cage Code:	Title:	Date:	Rev:	Model no:
	02WL0	PRODUCT DATA	4/5/04	None	H22-100

**This document describes the Specification for 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		2	4	GHz	
1.2	PEAK POWER			2000	WATTS	
1.3	PULSE WIDTH			10	μs	
1.4	DUTY			7.5	%	
1.5	AVG. POWER			150	WATTS	
1.6	CW POWER			150	WATTS	
2	POWER SPECIFICATIONS	GUARD BAND				
2.1	FREQUENCY		4	4.5	GHz	
2.2	PEAK POWER			20	WATTS	
2.3	PULSE WIDTH			0.5	μs	
2.4	DUTY			5	%	
2.5	CW POWER			1	WATT	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY		>4.5		GHz	
3.2	PEAK POWER			0.03	WATTS	
3.3	PULSE WIDTH		CW		μs	
3.4	DUTY		CW		%	
3.5	CW POWER			0.03	WATTS	
4	OPERATING FREQUENCY		2	4	GHz	
5	INSERTION LOSS					
5.1				1.5	dB	
6	ISOLATION					
6.1	INPUT TO OUTPUT		40		dB	
7	PHASE					
7.1	MATCHING					NOT SPECIFIED
7.2	TRACKING					NOT SPECIFIED
8	VSWR					
8.1	PORTS NOT SELECTED					INFINITE



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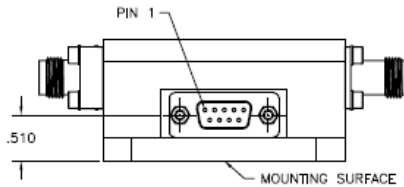
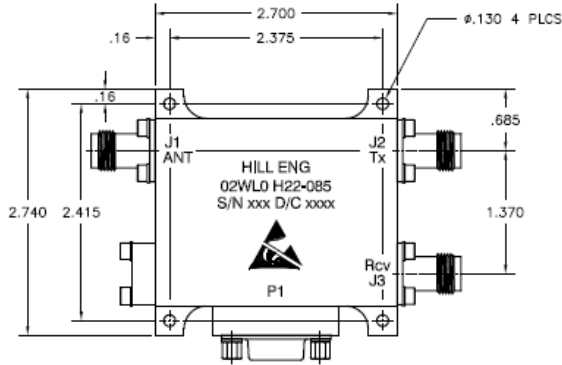
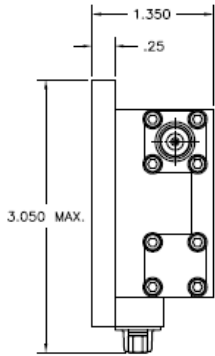
Title: **PRODUCT DATA**

Date: 4/5/04

Rev: None

Model no: H22-100

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
8	VSWR (CONT.)					
8.2	INPUT & OUTPUT, SELECTED PORTS			1.4:1		
8.3	TERMINATION			2.0:1		
8.4	SOURCE			1.2:1		
9	HARMONICS & SPURS					
9.1	INTERNALLY GENERATED					NOT SPECIFIED
9.2	MEASURED AT INCIDENT POWER			0	WATTS	
10	SWITCHING					
10.1	SPEED	50% Logic To 0.5dB		1.5	µs	
10.2	SWITCHING RATE			50	kHz	
10.3	COMMAND LOGIC	RS-422				
10.4	VIDEO LEAKAGE					NOT SPECIFIED
10.5	LOGIC TABLE					SEE DWG 3739 BELOW
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE		4.8	5.2	VDC	
11.2	NEGATIVE BIAS VOLTAGE		-66	-74	VDC	
11.4	POSITIVE BIAS CURRENT			300	mA	
11.5	NEGATIVE BIAS CURRENT			60	mA	
NOTE: NO OVER-VOLTAGE OR REVERSE POLARITY PROTECTION IS PROVIDED WITH THIS SWITCH.						
12	CONNECTORS					
12.1	RF					Type NF
12.3	DC					DEMM 9P
13	MECHANICAL					
13.1	WEIGHT			14	Oz.	
13.2	OUTLINE					SEE DWG 3739 BELOW
14	ENVIRONMENTAL					
14.1	OPERATING TEMPERATURE		0	+60	°C	
14.2	STORAGE TEMPERATURE		-20	+85	°C	
14.3	VIBRATION LEVEL					SHELTERED GROUND MOBILE



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
-	INITIAL RELEASE EDRN #2154	10/21/03	SPL
A	REVISED PER ECN #3128 (hnb)	2/23/04	SPL
B	REVISED PER ECN #3248 (hnb)	3/30/04	SPL

P1 CONNECTIONS	
PIN	SIGNAL
1	+5V
2	-70V
3	GND
4	LOGIC + (RS-422)
5	LOGIC - (RS-422)
6	GND
7	N/C
8	N/C
9	GND

TRUTH TABLE		
PIN 4	PIN 5	SELECTED PATH
0	1	Tx J2-J1
1	0	Rcv J1-J3

- NOTES:
- FINISH
    - PAINT PER PROCEDURE MB-105.
    - PRIMER: ZRC ZINC PRIMER HILL P/N 172-0003
    - PAINT: FLAT BLACK EPOXY ENAMEL HILL P/N 172-0002
    - MOUNTING SURFACE: CHEMICAL FILM.
  - MARKING
    - MARK PER PROCEDURE MEI-147.
    - MARKING: .125" HIGH BLACK CHARACTERS
    - LABEL: METALIZED POLYESTER SHEET HILL P/N 127-0010.
  - DATECODE FORMAT SHALL BE (YYWK) EXAMPLE: 0344.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES SURFACE FINISH		APPROVALS	DATE	
FINISH	2/FIN	DRAWN BY: HN BASKEN	10/21/03	
MATERIAL:	H22-100	CHECKED BY:		DRAWING TITLE:
PREP:	H22-085	DESIGNER: SP LEROUX	10/21/03	OUTLINE, T/R SWITCH
NEXT ASSY USED ON:		MANUFACTURER: J ALLEN	10/21/03	SIZ: B CASE CODE: 02WL0 DRAWING NO: 3739 REV: B
APPLICATIONS:	DO NOT SCALE DRAWING	CUSTOMER APPROVALS:		SCALE: 1/1 FILENAME: 3739b SHEET: 1 OF 1