

	Cage Code:	Title	Date:	Rev:	Model no:
	02WLO	PRODUCT DATA (subject to change)	8/3/04	None	H22-097

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 must be applied when operating this device.

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	At input connector		1000	WATTS	Absolute max, including reflections
1.3	PULSE WIDTH			42	μS	
1.4	DUTY			15	%	
1.5	AVG / CW POWER			150	WATTS	
2	POWER SPECIFICATIONS	GUARD BAND A				
2.1	FREQUENCY		4.0	6.0	GHz	
2.2	PEAK POWER			1000	WATTS	
2.3	PULSE WIDTH			42	μS	
2.4	DUTY			15	%	
2.5	CW POWER			150	WATTS	
3	POWER SPECIFICATIONS	GUARD BAND B				
3.1	FREQUENCY		6.0	8.0	GHz	
3.2	PEAK POWER			20	WATTS	
3.3	PULSE WIDTH			0.5	μS	
3.4	DUTY			5	%	
3.5	CW POWER			1	WATTS	
4	POWER SPECIFICATIONS	OUT OF BAND				
4.1	FREQUENCY		>8.0		GHz	
4.2	PEAK POWER			0.03	WATTS	
4.3	PULSE WIDTH		CW		μS	
4.4	DUTY		CW		%	
4.5	CW POWER			0.03	WATTS	
5	OPERATING FREQUENCY		2.0	4.0	GHz	
6	INSERTION LOSS					
6.1				2.1	dB	

Federal Cage Code 02WLO

	Cage Code:	Title	Date:	Rev:	Model no:
	02WLO	PRODUCT DATA (subject to change)	8/3/04	None	H22-097

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
7	ISOLATION					
7.1	INPUT TO OUTPUT		70		dB	
7.2	OUTPUT TO OUTPUT		70		dB	
8	PHASE					NOT SPECIFIED
9	VSWR					
9.1	PORTS NOT SELECTED					INFINITE
9.2	INPUT & OUTPUT, SELECTED PORTS			1.4:1		
9.3	LOAD			2.0:1		
9.4	SOURCE			1.2:1		
10	HARMONICS & SPURS					
10.1	INTERNALLY GENERATED			-60	dBc	
10.2	MEASURED AT INCIDENT POWER			0	dBm	
11	SWITCHING					
11.1	SPEED	50% TTL TO 0.5dB		3	μS	Microseconds
11.2	SWITCHING RATE			50	kHz	
11.3	COMMAND LOGIC	RS-422				
11.4	VIDEO LEAKAGE		2	5	V p-p	
11.5	LOGIC TABLE					SEE DWG 3859 below
12	D.C. POWER					
12.1	POSITIVE BIAS VOLTAGE		4.8	5.2	VDC	
12.2	NEGATIVE BIAS VOLTAGE		-66	-74	VDC	
12.4	POSITIVE BIAS CURRENT			300	mA	
12.5	NEGATIVE BIAS CURRENT			50	mA	
	NOTE: NO OVER-VOLTAGE OR REVERSE POLARITY PROTECTION IS PROVIDED WITH THIS SWITCH.					
13	CONNECTORS					
13.1	RF					NF
13.3	DC					SOLDER PINS
14	MECHANICAL					
14.1	WEIGHT			14	Oz.	
14.2	OUTLINE					SEE DWG 3859 below
15	ENVIRONMENTAL					
15.1	OPERATING TEMPERATURE		-0	+70	°C	
15.2	STORAGE TEMPERATURE		-55	+85	°C	
15.3	VIBRATION LEVEL					AIRBORNE SUBSONIC



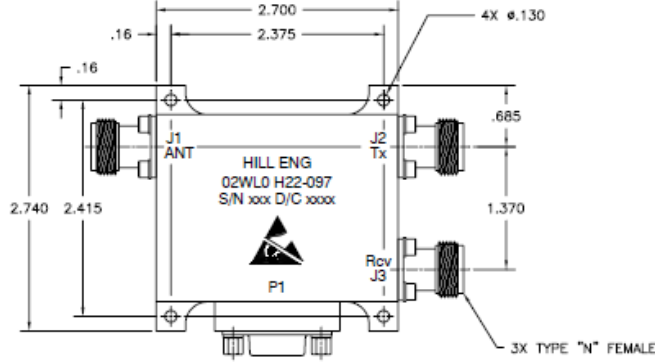
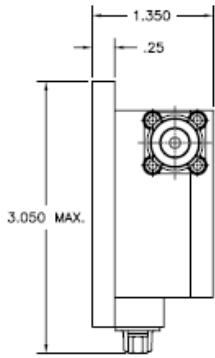
Cage Code: 02WLO

Title: **PRODUCT DATA**
(subject to change)

Date: 8/3/04

Rev: None

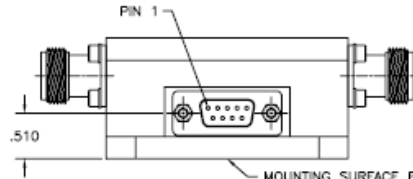
Model no: H22-097



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
-	INITIAL RELEASE EDNR #2417	7/30/04	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 MEI-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: 0438.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		APPROVALS: DATE: 6/8/04	
FINISHES: 21/04 DIMENSIONS: AS SHOWN SURFACE: 27/02 REMOVE ALL BORES FROM PARTS	CHECKED BY: SP LEROUX DATE: 7/30/04	DRAWING TITLE: OUTLINE, T/R SWITCH	
MATERIAL: H22-097	CHECKED BY: J ALLEN DATE: 7/30/04	ORDER APPROVALS:	SIZE: B ONE CODE: 02WLO DRAWING NO.: 3859
NEXT ASSY: USED ON:	APPLICATIONS: DO NOT SCALE DRAWING	SCALE: 1/1	PART NO.: 3859- SHEET: 1 OF 1