

	Cage Code:	Title:	Date:	Rev:	Model no:
	02WLO	PRODUCT DATA	4/22/98	None	L43-001

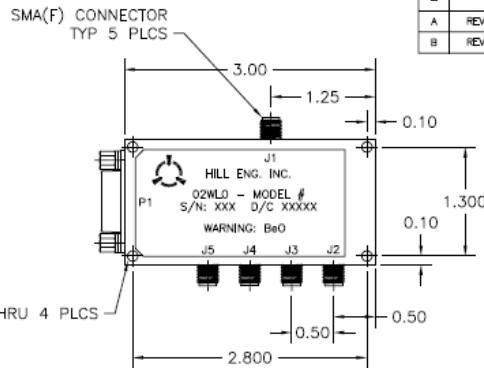
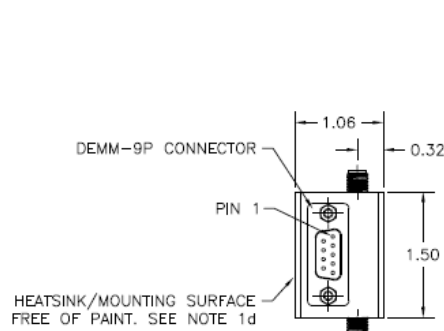
This document describes the performance of a high power 1P4T switch. This is a cold switched design i.e.; switched while RF is off. Proper bias levels must be applied when operating this device.

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
1	POWER SPECIFICATION	IN BAND				
1.1	FREQUENCY		3.95	8.2	GHz	
1.2	PEAK POWER			25	WATTS	
1.3	PULSE WIDTH			10	μS	
1.4	DUTY			20	%	
1.5	AVE. POWER			5	WATTS	
1.6	CW POWER			20	WATTS	
2	POWER SPECIFICATIONS	GUARD BAND				
2.1.1	FREQUENCY		3.55	3.95	GHz	
2.1.2	FREQUENCY		8.2	8.6	GHz	
2.2	PEAK POWER			25	WATTS	
2.3	PULSE WIDTH			10	μS	
2.4	DUTY			20	%	
2.5	AVE. POWER			5	WATTS	
2.6	CW POWER			20	WATTS	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY		>8.6		GHz	
3.2	PEAK POWER			0.03	WATTS	
3.3	PULSE WIDTH		N/A		μS	
3.4	DUTY		N/A		%	
3.5	AVE. POWER		N/A		WATTS	
3.6	CW POWER			0.03	WATTS	
4	OPERATING FREQUENCY		3.95	8.2	GHz	
5	INSERTION LOSS					
5.1		IN BAND		1.9	dB	
5.2		GUARD BAND		2.9	dB	
6	ISOLATION					
6.1		IN BAND	40		dB	
6.2		GUARD BAND	30		dB	
7	PHASE					
7.1	MATCHING					NOT SPECIFIED
7.2	TRACKING					NOT SPECIFIED

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8	VSWR					
8.1	PORTS NOT SELECTED					INFINITE
8.2	INPUT & OUTPUT, SELECTED PORTS			1.8:1		
8.3	TERMINATION			2.0:1		
8.4	SOURCE			1.6:1		
9	HARMONICS & SPURS					
9.1	INTERNALLY GENERATED					NOT SPECIFIED
9.2		MEASURED AT INCIDENT POWER		0	WATTS	
10	SWITCHING					
10.1	SPEED	50% TTL TO 90% RF		50	nS	
10.2	SWITCHING RATE			2	MHz	
10.3	VIDEO LEAKAGE				Vpp	NOT SPECIFIED
10.4	COMMAND LOGIC	TTL, STD. INVERTING				
10.4	LOGIC TABLE					SEE DWG 3047
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE		4.8	5.2	VDC	
11.2	NEGATIVE BIAS VOLTAGE		-24	-32	VDC	
11.4	POSITIVE BIAS CURRENT			300	mA	
11.5	NEGATIVE BIAS CURRENT			20	mA	
	NOTE 1: NO OVER-VOLTAGE OR REVERSE POLARITY PROTECTION IS PROVIDED WITH THIS SWITCH.					
	NOTE 2: NO RF POWER SHALL BE APPLIED TO THE UNIT IN THE "ALL OFF" CONDITION.					
12	CONNECTORS					
12.1	RF					SMAF
12.3	DC					9 pin D
13	MECHANICAL					
13.1	WEIGHT			8	Oz.	
13.2	OUTLINE					SEE DWG 3047
14	ENVIRONMENTAL					
14.1	OPERATING TEMPERATURE		-20	+60	°C	
14.2	STORAGE TEMPERATURE		-20	+70	°C	
14.3	VIBRATION LEVEL					GROUND TRANSPORT
14.4	DEVICE SCREENING	QP-121 LEVEL 2				SCREENING PER HILL QP-121 LEVEL 2.

Federal Cage Code 02WLO



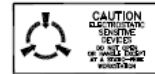
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
-	INITIAL DRN #518	9/21/99	SPL
A	REVISED PER ECN #1381 (dgb)	3/2/2000	SPL
B	REVISED PER ECN #1850 (hrb)	2/8/01	SPL

P1 CONNECTIONS	
PIN	SIGNAL
1	+5VDC
2	-V
3	GND
4	LOGIC J2
5	LOGIC J3
6	GND
7	LOGIC J4
8	LOGIC J5
9	GND

- NOTES:
- FINISH:
 - PAINT PER HILL ENG. MEI-105.
 - PRIMER: ZRC ZINC PRIMER P/N 172-0003.
 - PAINT: FLAT BLACK EPOXY ENAMEL P/N 172-0002.
 - HEATSINK/MOUNTING SURFACE CHEMICAL FILM PER HILL IP-125.
 - MARKING:
 - MARK PER MEI-147.
 - MARKING: 0.09" BLACK CHARACTERS.
 - LABEL: METALIZED POLYESTER SHEET P/N 127-0010.

LOGIC

OUTPUT	PIN 4	PIN 5	PIN 7	PIN 8
J2	0	1	1	1
J3	1	0	1	1
J4	1	1	0	1
J5	1	1	1	0
ISOLATED	1	1	1	1



NOTE: ANY OTHER LOGIC STATE IS NOT ALLOWED

(ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN INCHES) FINISHES: DIMS: HILLS SURFACE: 21/84 20 1/2 27/87 200 0.255 REMOVE ALL BURRS FROM PARTS		APPROVALS DATE DRAWN BY: HR BENSON 8/31/99 CHECKED BY:			
MATERIAL: 317 LEADUX MANUFACTURER: S. WAGO DC: K. RINDDAHL 9/17/99 CUSTOMER APPROVALS:		DRAWING TITLE: OUTLINE, SP4T TTL SWITCH		SIZE: B SCALE: 1/1	DRAWING NO.: 3047 FILENAME: 3047A SHEET: 1 OF 1
NEXT ASSY: USED ON: APPLICATIONS:		DO NOT SCALE DRAWING			