

	Cage Code:	Title:	Date:	Rev:	Model no:
	02WLO	PRODUCT DATA (Subject to change)	10/19/04	N/A	H23-022

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.

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
1	POWER SPECIFICATION	IN BAND				
1.1	FREQUENCY		3.8	8.20	GHz	
1.2	PEAK POWER	ABSOLUTE MAXIMUM	--	2000	WATTS	
1.3	PULSE WIDTH		--	4	μS	
1.4	DUTY		--	6	%	
1.5	AVERAGE POWER		--	120	WATTS	
2	POWER SPECIFICATION	GUARD BAND				
2.1	FREQUENCY		8.20	8.50	GHz	
2.2	PEAK POWER		--	1	WATT	
2.3	PULSE WIDTH		CW	--	μS	
2.4	DUTY		CW	--	%	
2.5	AVERAGE POWER		--	--	WATT	N/A
2.6	CW POWER		--	1	WATT	
3	POWER SPECIFICATION	OUT OF BAND				
3.1	FREQUENCY		>8.50	--	GHz	
3.2	PEAK POWER		--	30	dBm	
3.3	PULSE WIDTH		CW	--	μS	
3.4	DUTY		CW	--	%	
3.5	AVERAGE POWER		--	--	WATTS	N/A
3.6	CW POWER		--	30	dBm	
4	OPERATING FREQUENCY		4.00	8.20	GHz	
5	INSERTION LOSS					
5.1			--	1.3	dB	
6	ISOLATION					
6.1	INPUT TO OUTPUT		50		dB	
6.2	OUTPUT TO OUTPUT		50		dB	
7	PHASE SPECIFICATION					
7.1	MATCHING		--	--	DEG	NOT SPECIFIED
7.2	PHASE TRACKING		--	--	DEG	NOT SPECIFIED



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8	VSWR					
8.1	INPUT & OUTPUT	SELECTED PORTS	---	1.8:1	--	
8.2	PORTS NOT SELECTED		--	--	--	INFINITY
8.3	TERMINATION		---	2.0:1	--	
8.4	SOURCE		---	1.2:1	--	
9	HARMONICS & SPURS					
9.1	INTERNALLY GENERATED		--	--	dBc	NOT SPECIFIED
9.2		MEASURED AT INCIDENT POWER	--	0	dBm	
10	SWITCHING SPECIFICATIONS					
10.1	SWITCHING SPEED	TO 0.5 dB OF I.L.	--	1.2	uS	
10.2	SWITCHING RATE		--	100	kHz	
10.3	VIDEO LEAKAGE		--	--	Vpp	NOT SPECIFIED
10.4	COMMAND LOGIC TYPE					RS-422
10.5	LOGIC TABLE					SEE DWG 3783
11	D.C. SPECIFICATIONS					
11.1	POSITIVE BIAS VOLTAGE		4.8	5.5	V	
11.2	NEGATIVE BIAS VOLTAGE		-66	-74	V	
11.3	POSITIVE BIAS CURRENT		--	300	mA	
11.4	NEGATIVE BIAS CURRENT		--	60	mA	
11.5	NOTE 1: Power on sequence: To prevent damage to the switch apply the +5V first then the -70V.					
11.6	NOTE 2: No over-voltage or reverse polarity protection is provided in this switch.					
12	CONNECTORS & INTERFACE					
12.1	RF					SMA(F)
12.2	DC					Solder Pins
13	MECHANICAL					
13.1	WEIGHT		--	6	OZ.	
13.2	SIZE		--	--	IN.	SEE DWG 3783
13.3	FINISH		--	--	--	SEE DWG 3783



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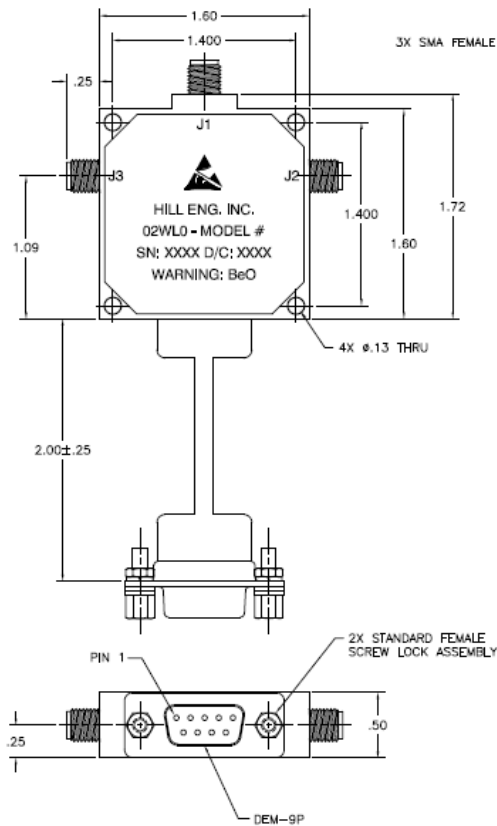
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14	ENVIRONMENTAL					
14.1	OPERATING TEMPERATURE		-20	+55	°C	
14.2	STORAGE TEMPERATURE		-20	+70	°C	
14.3	VIBRATION LEVEL					GND TRANSPORT
14.4	DEVICE SCREENING	LEVEL 2				SCREENING PER HILL ENGINEERING QUALITY PROCEDURE 121

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
-	-	INITIAL RELEASE EDRN #2230	12/15/03	SPL



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

OUTPUT	LOGIC+	LOGIC-
J1-J2	0	1
J1-J3	1	0

- NOTES:
- FINISH:
 - PAINT PER HILL ENG. MEI-105.
 - PRIMER: ZINC COATING (ZRC) P/N 172-0003
 - PAINT: FLAT BLACK EPOXY ENAMEL P/N 172-0002.
 - MOUNTING SURFACE SILVER PLATED IAW QQ-S-365 TYPE 3, GRADE A.
 - MARKING:
 - MARK PER MEI-147.
 - MARKING: .08" BLACK CHARACTERS.
 - LABEL: METALIZED POLY SHEET P/N 127-0010.



DATE	DESCRIPTION	BY	CHKD	APPROVED	DATE
12/15/03	INITIAL RELEASE	SPL			12/15/03
12/15/03	MARKET RELEASE	SPL			12/15/03

H23-005 MOD	DESIGNED BY	DATE	12/15/03
H23-022	DRAWN BY	DATE	12/15/03
H22-094	CHECKED BY	DATE	12/15/03
USED ON	DATE	DATE	

3783	REV	1
02WLO	REV	1