

	Cage Code:	Title:	Date:	Rev:	Model no:
	02WLO	<b>PRODUCT DATA</b> <b>(subject to change)</b>	7/13/02	none	M22-075

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		1000	2500	MHz	
1.2	PEAK POWER	ABSOLUTE MAXIMUM	--	100	WATTS	
1.3	PULSE WIDTH		--	CW	μS	
1.4	DUTY		--	CW	%	
1.5	AVERAGE POWER		--	100	WATTS	N/A
1.6	CW POWER		--	100	WATTS	
2	POWER SPECIFICATION	GUARD BAND				
2.1	FREQUENCY		2500	3000	MHz	
2.2	PEAK POWER		--	1	WATTS	
2.3	PULSE WIDTH			CW	μS	
2.4	DUTY			CW	%	
2.5	AVERAGE POWER		--	1	WATTS	N/A
2.6	CW POWER		--	1	WATTS	
3	POWER SPECIFICATION	OUT OF BAND				
3.1	FREQUENCY		>3000	--	MHz	
3.2	PEAK POWER		--	0.03	WATTS	
3.3	PULSE WIDTH		--	CW	μS	
3.4	DUTY		--	CW	%	
3.5	AVERAGE POWER		--	--	WATTS	N/A
3.6	CW POWER		--	14	dBm	
4	OPERATING FREQUENCY		1000	2500	MHz	
5	INSERTION LOSS			1.0	dB	
6	ISOLATION					
6.1	INPUT TO OUTPUT		40		dB	
6.2	OUTPUT TO OUTPUT		40		dB	
7	PHASE SPECIFICATION					
7.1	MATCHING		--	--	DEG	NOT SPECIFIED
7.2	PHASE TRACKING		--	--	DEG	NOT SPECIFIED

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ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
8	VSWR					
8.1	INPUT & OUTPUT	SELECTED PORTS	---	1.5:1	--	
8.2	PORTS NOT SELECTED		--	--	--	INFINITY (REFLECTIVE)
8.3	LOAD		---	2.5:1	--	
8.4	SOURCE		---	1.5:1	--	
9	HARMONICS & SPURS					
9.1	INTERNALLY GENERATED		--	--	dBc	NOT SPECIFIED
10	SWITCHING SPECIFICATIONS					
10.1	SWITCHING SPEED	50% LOGIC TO 90% RF	--	1	μS	
10.2	SWITCHING RATE		--	20	kHz	
10.3	VIDEO LEAKAGE		--	--	Vpp	NOT SPECIFIED
10.4	COMMAND LOGIC TYPE					RS-422
10.5	LOGIC TABLE					SEE DWG 2013
11	D.C. SPECIFICATIONS					
11.1	POSITIVE BIAS VOLTAGE		4.8	5.5	V	
11.3	NEGATIVE BIAS VOLTAGE		-26	-32	V	
11.4	POSITIVE BIAS CURRENT		--	1000	mA	
11.5	NEGATIVE BIAS CURRENT		--	70	mA	
11.6	NOTE 1: To prevent damage to the switch apply the +5V first then the -28V. No over-voltage or reverse polarity protection is provided.					
12	CONNECTORS & INTERFACE					
12.1	RF	J1, J2, J3	--	--	--	SMA(F)
12.3	DC	Solder pins	--	--	--	
13	MECHANICAL					
13.1	WEIGHT		--	5	Oz.	
13.2	SIZE		--	--	IN.	SEE DWG 2013
13.3	FINISH		--	--	--	SEE DWG 2013
14	ENVIROMENTAL					
14.1	OPERATING TEMPERATURE		-25	+70	°C	
14.2	STORAGE TEMPERATURE		-40	+70	°C	
14.3	VIBRATION LEVEL					GND TRANSPORT
14.4	DEVICE SCREENING	LEVEL 2	48		HRS	SCREENING PER HILL ENG QP 121

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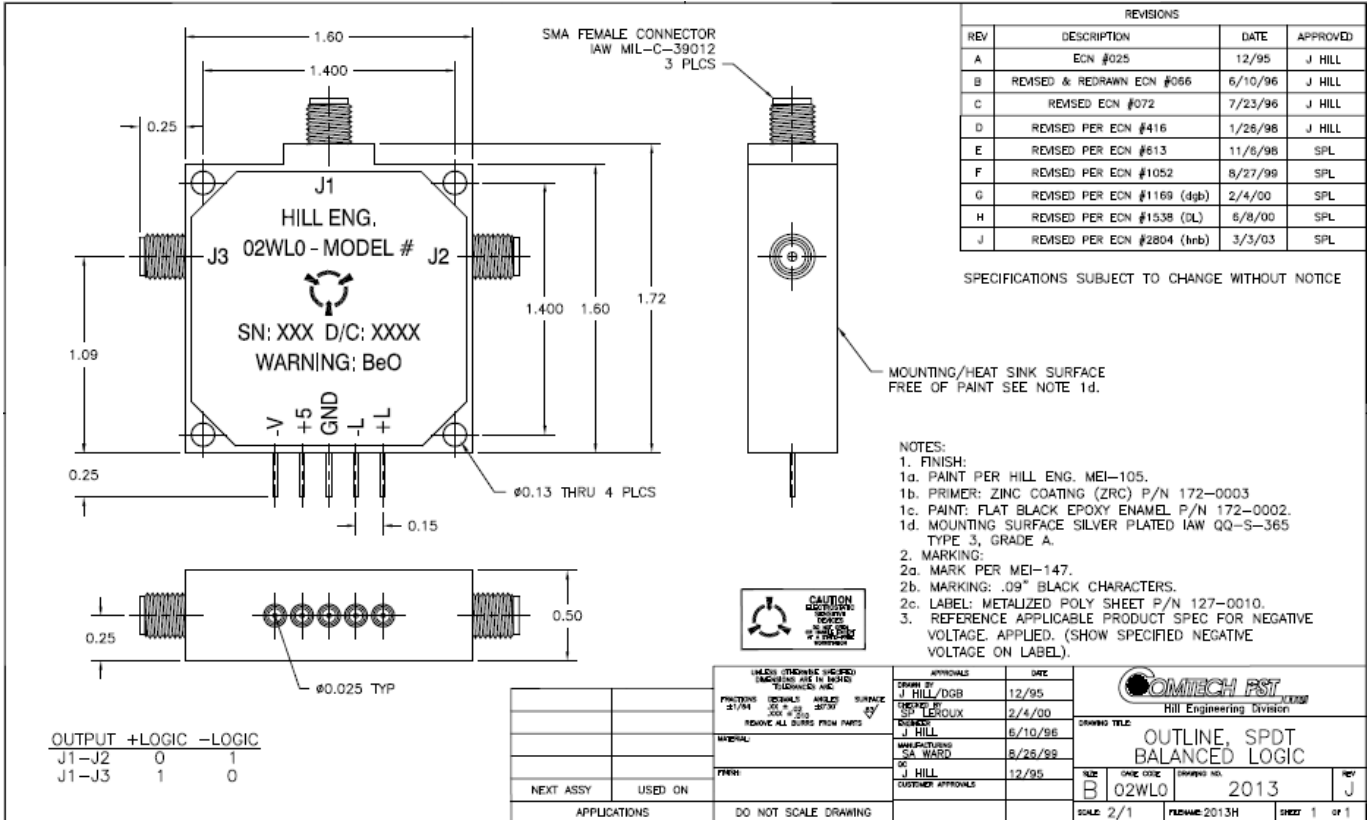
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Date: 7/13/02

Rev: none

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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ECN #025	12/95	J HILL
B	REVISED & REDRAWN ECN #066	6/10/96	J HILL
C	REVISED ECN #072	7/23/96	J HILL
D	REVISED PER ECN #416	1/26/98	J HILL
E	REVISED PER ECN #613	11/8/98	SPL
F	REVISED PER ECN #1052	8/27/98	SPL
G	REVISED PER ECN #1169 (dgb)	2/4/00	SPL
H	REVISED PER ECN #1538 (DL)	6/8/00	SPL
J	REVISED PER ECN #2804 (hrb)	3/3/03	SPL

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

- 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: .09" BLACK CHARACTERS.
    - LABEL: METALIZED POLY SHEET P/N 127-0010.
  - REFERENCE APPLICABLE PRODUCT SPEC FOR NEGATIVE VOLTAGE APPLIED. (SHOW SPECIFIED NEGATIVE VOLTAGE ON LABEL).

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

UNLESS OTHERWISE SPECIFIED (DIMENSIONS ARE IN INCHES) TOLERANCES ARE:		APPROVALS	DATE
FRACTIONS 21/64	DECIMALS .001	DESIGNED BY J HILL/DGB	12/95
ANGLES 30°	ANGLES 30°	DRAWN BY S. LEROUX	2/4/00
REMOVE ALL DIMS FROM PARTS		REVIEWED BY J HILL	6/10/96
MATERIAL		MANUFACTURED BY SA WARD	8/28/99
FINISH		BY J HILL	12/95
NEXT ASSY USED ON		CUSTOMER APPROVALS	
APPLICATIONS		DO NOT SCALE DRAWING	

COMTECH PST Hill Engineering Division	
DRAWING TITLE: <b>OUTLINE, SPDT BALANCED LOGIC</b>	
SIZE: B	DATE: 02WLO 2013
SCALE: 2/1	FILENAME: 2013H SHEET 1 OF 1