

	Cage Code:	Title:	Date:	Rev:	Model no:
	02WLO	PRODUCT DATA (Subject to change)	7/10/03	None	M21-038

This document describes the performance of a high power 1P2T switch. This is a cold switched designed to switch cold; i.e; switching should occur only when 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		100	1000	MHz	
1.2	PEAK POWER			250	WATTS	
1.3	PULSE WIDTH		--	100	nS	
1.4	DUTY		--	5%	%	
1.5	AVERAGE POWER		--	12.5	WATTS	
1.6	CW POWER		--	12.5	WATTS	
2	POWER SPECIFICATIONS	GUARD BAND				
2.1	FREQUENCY		1000	1250	GHz	
2.2	PEAK POWER		--	2	WATTS	
2.3	PULSE WIDTH		--	CW	μS	
2.4	DUTY		--	CW	%	
2.5	AVERAGE POWER		--	2	WATTS	
2.6	CW POWER		--	2	WATTS	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY			>1250	MHz	
3.2	PEAK POWER		--	0.03	WATTS	
3.3	PULSE WIDTH		CW	--	μS	
3.4	DUTY		CW	--	%	
3.5	AVERAGE POWER		--	--	WATTS	
3.6	CW POWER		--	0.03	WATTS	
4	OPERATING FREQUENCY		100	1000	MHz	
5	INSERTION LOSS			0.7	dB	
6	ISOLATION					
6.1	ISOLATION	ANY PORT	50		dB	
7	PHASE	MATCH/TRACK				NOT SPECIFIED
8	VSWR					
8.1	INPUT	SELECTED PORTS	--	1.8:1	--	



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ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
8.2	OUTPUT	SELECTED PORTS	--	1.7:1	--	
8.3	PORT NOT SELECTED		--	∞	--	Infinity
8.4	TERMINATION		--	2:1	--	
8.5	SOURCE		--	1.2:1	--	
9	HARMONICS & SPURS					
9.1	INTERNALLY GENERATED					NOT SPECIFIED
10	SWITCHING					
10.1	SPEED	TO 0.50DB	--	500	nS	
10.2	SWITCHING RATE		--	100	KHz	
10.3	COMMAND LOGIC	TTL				
10.4	LOGIC TABLE					SEE OUTLINE DWG BELOW
10.5	POSITION SENSE					NOT AVAILABLE
10.6	VIDEO LEAKAGE					NOT SPECIFIED
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE		4.8	5.2	VDC	
11.2	NEGATIVE BIAS VOLTAGE		-95	-105	VDC	
11.3	POSTIVE BIAS CURRENT			300	mA	
11.4	NEGATIVE BIAS CURRENT			60	mA	
12	CONNECTORS					
12.1	RF					SMA
12.2	DC					Solder pins
13	MECHANICAL					
13.1	WEIGHT		--	6.5	OZ	
13.2	OUTLINE					SEE DWG 03H02194-01 BELOW
14	ENVIRONMENTAL					
14.1	OPERATING TEMPERATURE		-20	+60	°C	
14.2	STORAGE TEMPERATURE		-55	+85	°C	
14.3	VIBRATION LEVEL					Airborne subsonic
14.4	DEVICE SCREENING	LEVEL 2				QP-121



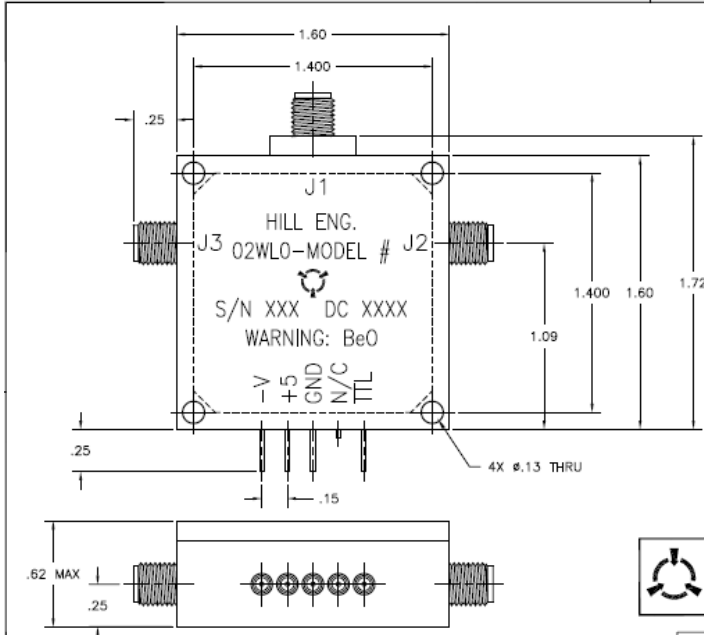
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
-	INITIAL RELEASE	7/23/96	J HILL
A	REVISED PER ECN #416	1/26/98	J HILL
B	REVISED PER ECN #696	2/12/99	SPL
C	REVISED PER ECN #2325 (dgb)	12/7/01	SPL
D	REVISED PER ECN #3348 (hnb)	8/25/04	AG

- 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
 - MARKING
 - MARK PER PROCEDURE MEI-147.
 - MARKING: .09" HIGH BLACK CHARACTERS
 - LABEL: METALIZED POLYESTER SHEET HILL P/N 127-0010.
 - DATECODE FORMAT SHALL BE (YYWK) EXAMPLE; 0445.
 - V IS A GENERIC TERM. REFER TO PRODUCT SPEC. LISTED IN JOB FOLDER FOR ACTUAL NEG. VOLTAGE VALUE AND MARK ACCORDINGLY. DO NOT MARK "-V."



LOGIC TABLE

OUTPUT	TTL	PATH
J1-J2	0	RCV
J1-J3	1	XMT

H22-081	
M21-044	
M21-043	
M21-038	
NEXT ASSY	USED ON

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS		APPROVALS	DATE
DESIGNED BY	DG BARKER	7/23/96	
CHECKED BY	J HILL	7/23/96	
MANUFACTURING			
QC	J HILL	12/95	
CUSTOMER APPROVALS			

COMTECH PST Hill Engineering Division

DRAWING TITLE: **OUTLINE, 1P2T TTL LOGIC, T/R**

SIZE: B
CAGE CODE: 02WLO
DRAWING NO.: 03H02194-01
REV: D

SCALE: 2/1
FILENAME: 03H02194-01.d
SHEET: 1 of 1