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	02WLO	PRODUCT SPECIFICATION	10/17/03	X	1 of 4	PS-H32-010

Approval	Name	Signature
Engineering:	Steve Leroux	
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Quality Assurance:	Tony Morello	
Customer: (If Required)		

Revision Record Cover Sheet		
Revision	Date	Change Description
X	4/1/09	Preliminary for customer approval – Unreleased, uncontrolled document.

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1 PURPOSE

- 1.1 The purpose of this specification is to define the Electrical and Mechanical parameters for products in accordance with customer sales order. When customer purchase order specifies external specifications such as Specification Control Drawing (SCD) and or Statement of Work (SOW) those documents takes precedence and internal product specification will not be issued.

2 RESPONSIBILITY AND APPLICABILITY

- 2.1 This Product specification is applicable to all activities relating to company's Quality System.
- 2.2 It is the responsibility of the Quality Assurance Manager to ensure that this specification is accurate, understood, and effectively implemented.
- 2.3 Changes made to this specification shall be processed in accordance with the document control procedures.

3 APPLICABLE DOCUMENTS

- 3.1 The following documents of issue in effect on the date thereof, ranked in order of governing priority in the event of conflict there between, form a part of this document to the extent herein specified.
- 3.1.1 Customers Purchase Order
 - 3.1.2 Statement of Work
 - 3.1.3 Specification Control Drawing
 - 3.1.4 Hill Engineering Sales Order
 - 3.1.5 Hill Engineering Product Specification
 - 3.1.6 Hill Engineering Product Assembly Configuration

3.2 CONDITIONS

- 3.3 **This document describes the specification for a high power 1P3T switch with internal switch driver. This is a cold switched design i.e.; switched while RF is off. Proper bias levels per section 11 must be applied before operating this switch**



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ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
1	POWER SPECIFICATION	IN BAND				
1.1	FREQUENCY		500	1900	MHz	
1.2	PEAK POWER			2000	WATTS	
1.3	PULSE WIDTH			10	μS	
1.4	DUTY			6	%	
1.5	AVG. POWER			120	WATTS	
2	POWER SPECIFICATIONS	GUARD BAND				
2.1	FREQUENCY		2200	2600	MHz	
2.2	PEAK POWER			20	WATTS	
2.3	PULSE WIDTH			10	μS	
2.4	DUTY			6	%	
2.5	CW POWER			1.2	WATTS	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY		>2600		MHz	
3.2	PEAK POWER			10	dBm	
3.3	PULSE WIDTH		CW		μS	
3.4	DUTY		CW		%	
3.5	CW POWER			10	dBm	
4	OPERATING FREQUENCY		500	1900	MHz	
5	INSERTION LOSS					
5.1				1	dB	
6	ISOLATION					
6.1	INPUT TO OUTPUT			30	dB	
6.2	OUTPUT TO OUTPUT			30	dB	
7	PHASE					
7.1	MATCHING					NOT SPECIFIED
7.2	TRACKING					NOT SPECIFIED
8	VSWR					
8.1	PORTS NOT SELECTED					REFLECTIVE



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ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
8	VSWR (CONT.)					
8.2	INPUT & OUTPUT, SELECTED PORTS		1.4:1			
8.3	TERMINATION		2.0:1			
8.4	SOURCE		1.2:1			
9	HARMONICS & SPURS					
9.1	INTERNALLY GENERATED					NOT SPECIFIED
9.2	MEASURED AT INCIDENT POWER			0	WATTS	
10	SWITCHING					
10.1	SPEED	50% Logic To 0.5dB		4	uS	
10.2	SWITCHING RATE			10	kHz	
10.3	COMMAND LOGIC	TTL				SEE DWG 4042
10.4	VIDEO LEAKAGE					NOT SPECIFIED
10.5	LOGIC TABLE					SEE DWG 4042
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE		4.8	5.2	VDC	
11.2	NEGATIVE BIAS VOLTAGE		-95	-100	VDC	
11.2	POSITIVE BIAS CURRENT			400	mA	
11.3	NEGATIVE BIAS CURRENT			60	mA	
12	INSTALLATION					SEE DWG 4042
13	CONNECTORS					
13.1	RF					NF
13.3	DC					Multi pin D type
14	MECHANICAL					
14.1	WEIGHT			2	lb	
14.2	OUTLINE					SEE DWG 4042
15	ENVIRONMENTAL					
15.1	OPERATING TEMPERATURE		-20	+71	°C	
15.2	STORAGE TEMPERATURE		-40	+85	°C	
15.3	VIBRATION LEVEL					