	Cage Code:	Title:	Date:	Rev:	Model no:
Hill Engineering Division	02WL0	PRODUCT DATA	5/3/05	None	M42-019
		(subject to change)			

This document describes the performance of a high power 1P4T switch. This is a HOT switched design i. e; switched while RF is on or off. Proper bias levels per item no.11 must be applied when operating this device. NOTE: Specifications will be random during hot switching.

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
1	POWER SPECIFICATION	IN BAND				
1.1	FREQUENCY		0.5	2.0	GHz	
1.2	PEAK POWER			20	Watts	
1.3	PULSE WIDTH		-	CW		
1.4	DUTY			CW	%	
1.5	CW POWER			20	Watts	
2	POWER SPECIFICATIONS	GUARD BAND				
2.1	FREQUENCY		2.0	2.5	GHz	
2.2	PEAK POWER			0.5	Watts	
2.3	PULSE WIDTH		-	CW		
2.4	DUTY			CW	%	
2.5	AVERAGE POWER			0.5	Watts	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY			>2.5	GHz	
3.2	PEAK POWER			0.01	Watt	
3.3	PULSE WIDTH			CW	μS	
3.4	DUTY			CW	%	
3.5	AVERAGE			CW	Watts	
4	OPERATING FREQUENCY		0.5	2.0	GHz	
5	INSERTION LOSS			2.3	dB	
6	ISOLATION					
6.1		Input To Output	40		dB	
6.2		Output To Output	40		dB	
7	PHASE	MATCH/TRACK				NOT SPECIFIED
8	VSWR					VSWR will be random during hot switching
8.1	INPUT			1.6:1		omoning
8.2	OUTPUT			1.6:1		
8.3	TERMINATION			2.0:1		
8.4	PORTS NOT SELECTED			∞		INFINITY (reflective)
8.5	SOURCE			1.4:1		

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ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
9	HARMONICS & SPURS					
9.1	INTERNALLY GENERATED					NOT SPECIFIED
9.2		MEASURED AT INCIDENT POWER		0	Watts	NOT SPECIFIED
4.0	014/1701/1110					
10	SWITCHING				-	
10.1	SWITCHING SPEED	TO 0.5 dB OF I.L.		1	μS	
10.2	SWITCHING RATE			100	KHz	
10.3	VIDEO LEAKAGE				Vpp	NOT SPECIFIED
10.4	COMMAND LOGIC TYPE:	RS-422, BALANCED				
10.5	LOGIC TABLE					SEE OUTLINE DWG 2657
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE		4.8	5.5	VDC	
11.2	NEGATIVE BIAS VOLTAGE		-26	-32	VDC	
11.3	POSITIVE BIAS CURRENT			500	mA	
11.4	NEGATIVE BIAS CURRENT			60	mA	
11.5	VOLTAGE PROTECTION					THIS UNIT DOES NOT HAVE OVERVOLTAGE OR REVERSE POLARITY PROTECTION ON ANY BIAS PORT
12	CONNECTORS					
12.1	RF					SMAF
12.2	DC					DAM-9
13	MECHANICAL					
13.1	WEIGHT			16	OZ.	
13.2	OUTLINE				inches	SEE DWG 2657
14	ENVIRONMENTAL	WEATHERPROOF				
14.1	OPERATING TEMPERATURE		-20	+60	°C	
14.2	STORAGE TEMPERATURE		-20	+60	°C	
14.3	VIBRATION LEVEL					Ground Transport
14.4	DEVICE SCREENING	LEVEL 2				QP-121 LEVEL 2



