	Cage Code:	Title:	Date:	Rev:	Model no:
Hill Engineering Division	02WL0	PRODUCT DATA	6/11/99	None	L16-007

This document describes the performance of a high power 1P1T switch. This is a cold switched design i.e.; switched while RF is off. Proper bias levels must be applied when operating this device.

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
1	POWER SPECIFICATION	IN BAND				
1.1	FREQUENCY		8	18	GHz	
1.2	PEAK POWER			20	WATTS	
1.3	PULSE WIDTH		CW		μS	
1.4	DUTY		CW		%	
1.5	CW POWER			20	WATTS	
2	POWER SPECIFICATIONS	GUARD BAND				
2.1	FREQUENCY		18	19	GHz	
2.2	PEAK POWER			1	WATTS	
2.3	PULSE WIDTH		CW		μS	
2.4	DUTY		CW		%	
2.5	CW POWER			1	WATTS	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY		>19		GHz	
3.2	PEAK POWER			0.003	WATTS	
3.3	PULSE WIDTH		CW		μS	
3.4	DUTY				%	
3.5	CW POWER			0.003	WATTS	
4	OPERATING FREQUENCY		8	18	GHz	
5	INSERTION LOSS					
5.1	6 – 16 GHz			1.40	dB	
5.2	16 – 18 GHz			1.60	dB	
6	ISOLATION					
6.1	6 – 18 GHz		55		dB	
7	PHASE					
7.1	MATCHING					NOT SPECIFIED
7.2	TRACKING					NOT SPECIFIED

	Cage Code:	Title:	Date:	Rev:	Model no:
Hill Engineering Division	02WL0	PRODUCT DATA	6/11/99	None	L16-007

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
8	VSWR					
8.1	INPUT & OUTPUT, SELECTED PORTS			1.8:1		
8.2	PORTS NOT SELECTED					INFINITE
8.3	TERMINATION			2.0:1		
8.4	SOURCE			1.6:1		
9	HARMONICS & SPURS					
9.1	INTERNALLY GENERATED			-50	DBc	
9.1	DESIGN GOAL			-70	DBc	
9.3	MEASURES AT INCIDENT POWER			0	DBm	
10	SWITCHING					
10.1	SPEED	50% TTL TO 90% RF		120	nS	
10.2	SWITCHING RATE			500	KHz	
10.3	VIDEO LEAKAGE					NOT SPECIFIED
10.4	COMMAND LOGIC TYPE					TTL
10.4	LOGIC TABLE					SEE DWG 2258
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE		4.50	5.50	VDC	
11.2	NEGATIVE BIAS VOLTAGE		-26	-30	VDC	
11.4	POSITIVE BIAS CURRENT			300	mA	
11.5	NEGATIVE BIAS CURRENT			40	mA	
	NOTE: NO OVER-VOLTA	GE OR REVERSE POI	ARITY P	ROTECT	ION IS PRO	OVIDED WITH THIS SWITCH.
12	CONNECTORS					
12.1	RF					SMAF
12.3	DC					SOLDER PINS
	-					
13	MECHANICAL					
13.1	WEIGHT			3	Oz.	
13.2	OUTLINE					SEE DWG 2258
,						
14	ENVIRONMENTAL					
14.1	OPERATING TEMPERATURE		-50	+71	°C	
14.1	OPERATING TEMPERATURE STORAGE TEMPERATURE		-50 -50	+71 +85	°C	



Cage Code: 02WL0

Title:

PRODUCT DATA

Date:

6/11/99

Rev:

None

Model no:

L16-007

