

	Cage Code:	Title:	Date:	Rev:	Model no:
	02WL0	PRODUCT DATA (subject to change)	2/17/99	N/A	WS51-005

This document describes the performance of a high power 1P1T switched receiver protector. This is a cold switched design i. e; switched while RF is off. Proper bias levels per item no. 11 must be applied for active mode protection.

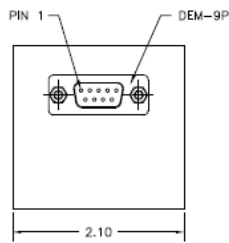
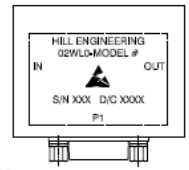
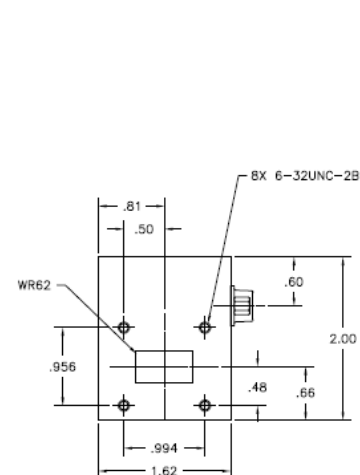
ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
1	POWER SPECIFICATION	IN BAND				
1.1	FREQUENCY		15.2	18.2	GHZ	
1.2	PEAK POWER			80	WATTS	
1.3	PULSE WIDTH		10	350	μS	
1.4	DUTY		---	43	%	
1.5	CW POWER		---	35	WATTS	
2	POWER SPECIFICATIONS	GUARD BAND				
2.1	FREQUENCY		18.2	19.5	GHZ	
2.2	PEAK POWER		---	1	WATTS	
2.3	PULSE WIDTH				CW	
2.4	DUTY				CW	
2.5	CW POWER		---	1	WATT	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY		---	>19.5	GHZ	
3.2	PEAK POWER		---	0.003	WATTS	
3.3	PULSE WIDTH				CW	
3.4	DUTY				CW	
3.5	CW POWER		---	0.003	WATTS	
4	OPERATING FREQUENCY		15.2	18.2	GHZ	
5	INSERTION LOSS		---	0.80	DB	
6	ISOLATION	INPUT TO OUTPUT	40	---	DB	
7	PHASE					
7.1	MATCHING					NOT SPECIFIED
7.2	PHASE TRACKING					NOT SPECIFIED
8	VSWR					
8.1	INPUT	15.2 TO 18.2 GHz	---	1.60:1		
8.2	OUTPUT	15.2 TO 18.2 GHz	---	1.60:1		
8.3	INPUT	16.4 TO 17.0 GHz	---	1.40:1		
8.4	OUTPUT	16.4 TO 17.0 GHz	---	1.40:1		

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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	
10	SWITCHING					
10.1	SPEED	TO 0.50DB	---	500	NSec	
10.2	SWITCHING RATE		---	20	KHz	
10.3	COMMAND LOGIC	TTL				
10.4	LOGIC TABLE					SEE DWG 2257
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE		4.8	5.2	VDC	
11.2	NEGATIVE BIAS VOLTAGE		-14	-18	VDC	
11.3	POSTIVE BIAS CURRENT		---	300	MA	
11.4	NEGATIVE BIAS CURRENT		---	30	MA	
12	CONNECTORS					
12.1	RF					WR-62 FLAT FLANGE
12.2	DC					DAM-9P
13	MECHANICAL					
13.1	WEIGHT		---	6.7	OZ	
13.2	OUTLINE & FINISH					SEE DWG 2257
14	ENVIRONMENTAL					
14.1	OPERATING TEMPERATURE		-55	+71	°C	
14.2	STORAGE TEMPERATURE		-55	+71	°C	
14.3	VIBRATION LEVEL					AIRBORNE INHABITED
14.4	WAVEGUIDE PRESSURE		---	15	PSIG	
14.5	DEVICE SCREENING	QP-121 LEVEL 2	---	---		DEVICE SCREENING PER HILL PROCEDURE QP-121 LEVEL 2.



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REV	DESCRIPTION	DATE	APPROVED
-	INITIAL RELEASE	9/4/96	JCH
A	REVISED PER ECN #334	11/11/97	JCH
B	REVISED PER ECN #366	12/04/97	JCH
C	REVISED PER ECN #409	1/20/98	J HILL
D	REVISED PER ECN #1130 (djh)	11/23/99	JCH
E	REVISED PER ECN #3230 (hrb)	3/19/04	JA

TTL	OPERATION
1	INS. LOSS
0	ISOLATION

P1	PIN #	FUNCTION
	1	+5VDC
	2	-15V
	3	N/C
	4	TTL
	5	N/C
	6	DC RTN
	7	N/C
	8	N/C
	9	LOGIC RTN



- NOTES:
- FINISH: CHEMICAL FILM PER HILL IP-125.
 - MARKING:
 - MARK PER MEI-147.
 - MARKING: .09" BLACK CHARACTERS.
 - LABEL: METALIZED POLYESTER SHEET P/N 127-0010.

HILL ENGINEERING 31/94 31/94 31/94 31/94 31/94 31/94		APPROVALS		DIC
DESIGNED BY DG BARKER		CHECKED BY		5/7/97
DRAWN BY JIC HILL		MANUFACTURING		5/7/97
MATERIAL		DC		
PARTS		JIC HILL		
NEXT ASSY USED ON		CUSTOMER APPROVALS		
APPLICATIONS		DO NOT SCALE DRAWING		

COMTECH PST Hill Engineering Division	
DRAWING TITLE OUTLINE SWITCH Ku BAND SWITCH	
REV B	DRAWING NO. 02WL0 03H02257-01
SCALE: 1/1	FILE NO: 03H02257-01A SHEET 1 OF 1

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