

	Cage Code:	Title:	Date:	Rev:	Model no:
	02WLO	PRODUCT DATA (subject to change)	12/22/03	N/A	WS52-028

This document describes the performance of a high power 1P2T switch. This is a cold switched design i. e; switched while RF is off. Proper bias levels per item no. 11 must be applied before operating this switch.

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
1	POWER SPECIFICATION	IN BAND				
1.1	FREQUENCY		12.4	18	GHz	
1.2	PEAK POWER			2000	WATTS	
1.3	PULSE WIDTH	UP TO		10	μS	
1.4	DUTY			4	%	
1.5	AVE. POWER			80	WATTS	
2	POWER SPECIFICATION	GUARD BAND				
2.1	FREQUENCY		18	19	GHz	
2.2	PEAK POWER			200	WATTS	
2.3	PULSE WIDTH			10	μS	
2.4	DUTY			4	%	
2.5	CW POWER			8.0	WATTS	
3	POWER SPECIFICATION	OUT OF BAND				
3.1	FREQUENCY		>19.0		GHz	
3.2	PEAK POWER			5	WATTS	
3.3	PULSE WIDTH			10	μS	
3.4	DUTY			4	%	
3.5	CW POWER			0.2	WATTS	
4	OPERATING FREQUENCY		12	18	GHz	
5	INSERTION LOSS			1.8	dB	
6	ISOLATION					
6.1	INPUT TO OUTPUT		40		dB	
6.2	OUTPUT TO OUTPUT		40		dB	
7	PHASE/AMPLITUDE					Not Specified

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8	VSWR					
8.1	INPUT & OUTPUT SELECTED PORTS			1.8:1	---	
8.2	PORTS NOT SELECTED				---	INFINITY
8.3	TERMINATION			2.0:1	---	
8.4	SOURCE			1.4:1	---	
9	HARMONICS & SPURS					
9.1	INTERNALLY GENERATED				dBc	NOT SPECIFIED
10	SWITCHING					
10.1	SPEED	TO 0.50 dB		1.0	MicroS	
10.2	RATE			75	kHz	
10.3	VIDEO LEAKAGE				Vpp	NOT SPECIFIED
10.4	COMMAND LOGIC					RS-422
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE		4.8	5.5	VDC	
11.2	NEGATIVE BIAS VOLTAGE		-66	-72	VDC	
11.3	POSTIVE BIAS CURRENT			300	mA	
11.4	NEGATIVE BIAS CURRENT			20	mA	
12	CONNECTORS					
12.1	RF					WR-90 FLAT FLANGE
12.2	DC & LOGIC					DAM-9P, MATES W/ M24308/1-1
12.3	PIN DESIGNATION & LOGIC TABLE					SEE DWG 3779 below
13	MECHANICAL					
13.1	WEIGHT			36	OZ	
13.2	OUTLINE					SEE DWG 3779 below
13.3	PRESSURIZATION			15	PSIG	
14	ENVIRONMENTAL					
14.1	OPERATING TEMPERATURE		-20	+60	°C	
14.2	STORAGE TEMPERATURE		-40	+85	°C	

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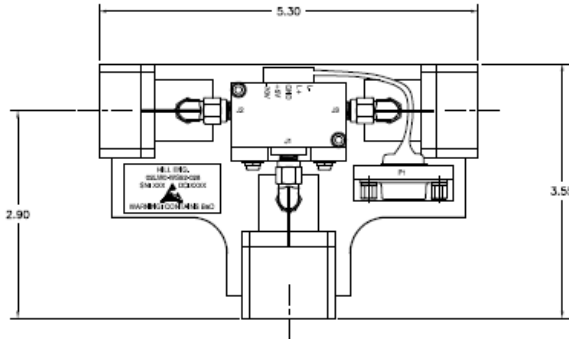
Title: **PRODUCT DATA**
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Rev: N/A

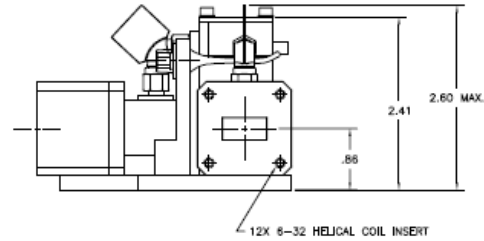
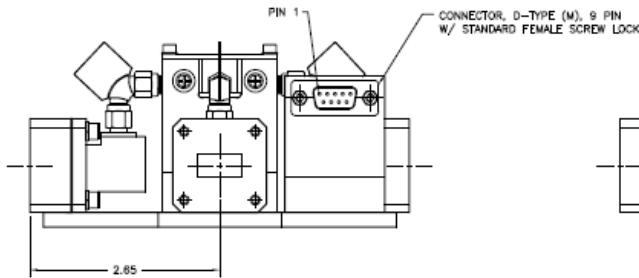
Model no: **WS52-028**

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
-	-	INITIAL RELEASE EDN #2209	12/17/03	JC HILL
A	A	REVISED PER EDN #5272 (tbl)	6/11/04	J ALLEN



P1 CONNECTIONS	
PIN	SIGNAL
1	+5V
2	-70V
3	GND
4	N/C
5	N/C
6	GND
7	LOGIC + (RS-422)
8	LOGIC - (RS-422)
9	GND

LOGIC TABLE		
RF PATH	L+	L-
J1-J2	0	1
J1-J3	1	0



CHECKED BY: [Signature] DATE: 12/10/03		APPROVED BY: [Signature] DATE: 12/10/03	
DRAWING TITLE: OUTLINE, 1P2T Ku BAND WAVEGUIDE SWITCH		DRAWING NO: 3779	
PART NO: WS52-028		REV: C	
NEXT ASSY: USED ON		REVISION: 3779a	
APPLICATIONS: DO NOT SCALE DRAWING		SHEET: 1 OF 1	

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