



Cage Code:
02WLO

Title:
PRODUCT DATA
(subject to change)

Date:
4/21/00

Rev:
None

Model no:
M42-011

This document describes the performance of a high power 1P4T switch. This is a cold switched design i. e; switched while RF is off. Proper bias levels per item no. 11 must be applied when operating this device.

ITEM NO	CHARACTERISTIC	CONDITIONS	MIN	MAX	UNITS	COMMENTS
1	POWER SPECIFICATION	IN BAND				
1.1	FREQUENCY		1.3	4.2	GHz	
1.2	PEAK POWER			160	Watts	
1.3	PULSE WIDTH		-	100	µS	
1.4	DUTY			35	%	
1.5	CW POWER			56	Watts	
2	POWER SPECIFICATIONS	GUARD BAND				
2.1	FREQUENCY		4.2	4.5	GHz	
2.2	PEAK POWER			2	Watts	
2.3	PULSE WIDTH			100	µS	
2.4	DUTY			35	%	
2.5	AVERAGE POWER			0.7	Watts	
3	POWER SPECIFICATIONS	OUT OF BAND				
3.1	FREQUENCY			>4.5	GHz	
3.2	PEAK POWER			0.01	Watt	
3.3	PULSE WIDTH			100	µS	
3.4	DUTY			15	%	
3.5	AVERAGE			0.0015	Watts	
4	OPERATING FREQUENCY		1.3	4.5	GHz	
5	INSERTION LOSS			1	dB	
6	ISOLATION					
6.1		Input To Output	50		dB	
6.2		Output To Output	50		dB	
7	PHASE					
7.1	MATCHING					NOT SPECIFIED
7.2	PHASE TRACKING					NOT SPECIFIED
8	VSWR					
8.1	INPUT			1.8:1		
8.2	OUTPUT			1.8:1		
8.3	TERMINATION			2.0:1		
8.4	PORTS NOT SELECTED			∞		INFINITY
8.5	SOURCE			1.4:1		



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9	HARMONICS & SPURS					
9.1	INTERNALLY GENERATED					NOT SPECIFIED
9.2		MEASURED AT INCIDENT POWER		0	Watts	NOT SPECIFIED
10	SWITCHING					
10.1	SWITCHING SPEED	TO 0.5 dB OF I.L.		1	μS	
10.2	SWITCHING RATE			20	KHz	
10.3	VIDEO LEAKAGE	NONE AFTER 1 μS			Vpp	
10.4	COMMAND LOGIC TYPE:	TTL				
10.5	LOGIC TABLE					SEE OUTLINE DWG 2025
11	D.C. POWER					
11.1	POSITIVE BIAS VOLTAGE		4.8	5.5	VDC	
11.2	NEGATIVE BIAS VOLTAGE		-26	-30	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			8	oz.	
13.2	OUTLINE				inches	SEE DWG 2025
14	ENVIRONMENTAL	WEATHERPROOF				
14.1	OPERATING TEMPERATURE		0	+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



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