

EIDP Coveragepage For JFET Testing

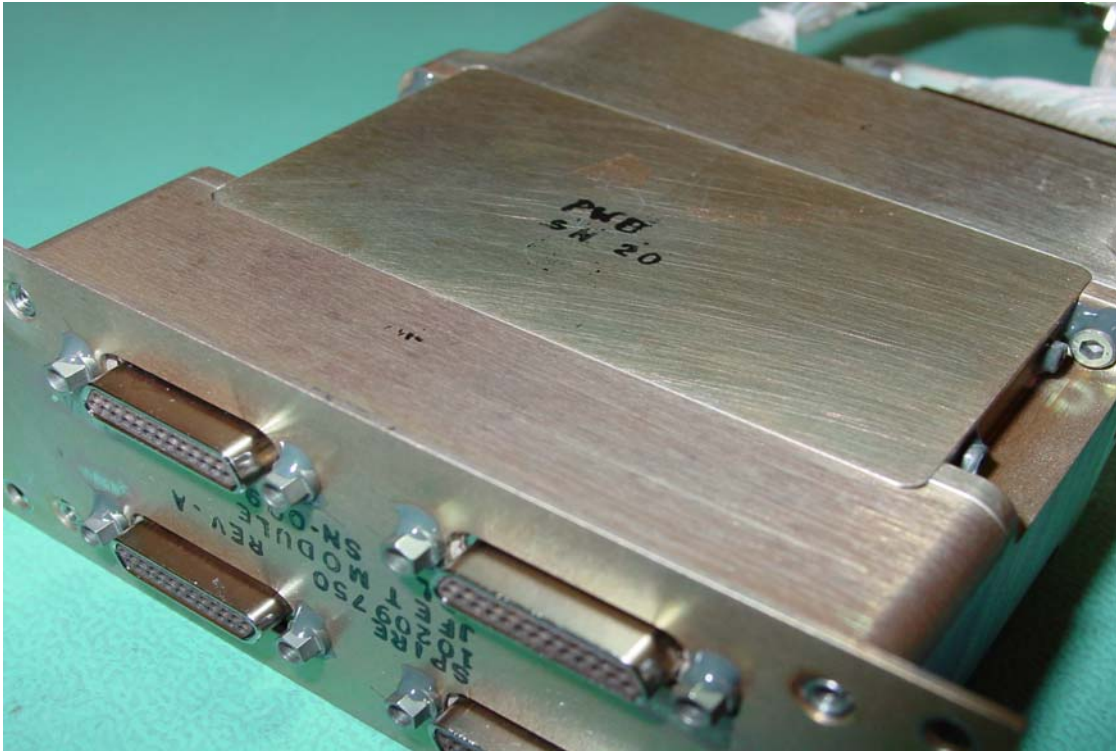
Unit Identification						
Name	:	JFET PFM Module				
Part #	:	10209750-1				
S/N	:	#009				

Environmental Testing		Axes Tested	Temp	Duration/# of Cycle	Requirement	Source	Waiver
Random Vibration Test		X, Y, Z	Rm T	1 min/axis	X, Y, Z	SSSD, JFET-DES-07	
High Level Sine Vibe Test		None	NA	NA	X, Y, Z	SSSD, JFET-DES-07	HR-SP-JPL-RFW-005
Bakeout		NA	80 C	25.5 hrs	> 24 HRS		
Thermal Cycles		NA	RmT to 80 K	2	Minimum 1	D-20549	

Performance Characteristics						
			Specification		Source	Waiver
Power needed for <11 bad channels (Min Perf.)	8.70 mW	11 mW for CQM, 7 mW for PFM/FS		SSSD, JFET-TEC-05, JFET-PER-02	HR-SP-JPL-RFW-004	
Power needed for <4 bad channels (Design Value)	9.45 mW	11 mW for CQM, 7 mW for PFM/FS		SSSD, JFET-TEC-05, JFET-PER-02		
Power needed for 100 % Yield per unit	10.54 mW	NA		NA		
Median Noise at < 11 bad chs.	8.09 nV/rHz	<15 nV/rHz Min Performance	<7 nV/rHz Design Value	SSSD, JFET-PER-01		
Median Noise at < 4 bad chs.	7.35 nV/rHz			SSSD, JFET-PER-01		
Median Noise at 100 % Yield.	6.76 nV/rHz			SSSD, JFET-PER-01		
# of Channels over the max. offset voltage	0	< 15 mV			SSSD, BDA-DRCU-27	
Common Mode Rejection Ratio	< -60 dB by design, as measured in EM4 unit				SSSD, BDA-DRCU-11	

Board Level Details		Board SN 020 (JAA'-JDD')		Board SN 024 (JAA'-JDD)		Source
# Channels Tested	:	24		24		
Median Noise at 3.5 mW	:	30.4 nV/rHz		14.01 nV/rHz		SSSD, JFET-PER-01
# of good channels at 3.5 mW	:	2	8% Yield	13	54% Yield	SSSD, JFET-PER-02
Power Needed for 100 % Yield	:	5.49 mW		5.04 mW		SSSD, JFET-PER-02
Median Noise at High Power (w/ 100 % Yield)		6.07 nV/rHz		7.18 nV/rHz		SSSD, JFET-PER-01
Median Gain at High Power		0.98		0.98		NA
Heater Resistance, 4K Reference value		2.320 kΩ		3.232 kΩ		NA

Definitions					
Good Channels	:	Noise less than a min. performance value of 15 nV/rHz			
Yield	:	# of Good Channels / 24			
Filenames					
Noise Measurements	:	JFET_Module_SN09_Noise_data.pdf			
Source Voltages (RmT, 4K)	:	JFET Module SN08,SN09 source voltage data.pdf			
Notes					
1)	The Base temperature for all performance characterization was 4K				
2)	All Noise Measurements were made with the inputs shorted to ground				
3)	Type of membranes:	SN020: 29% Overetched	SN024: 32% Overetched		



SPIRE JFET Module S/N 009