

Sherwood Engineering HF Test Results

Model: FRG-100 Serial # 2N020394 Test Date 02-16-93

IF BW, Wide AM -6/-60, kHz: 7.6/17.9 Ultimate 70 dB Phase noise
 IF BW, Narrow AM -6/-60, kHz: 6.9/17.2 Ultimate 70 dB Phase noise
 IF BW, SSB/RTTY -6/-50 kHz: -50 dB 2.6/3.7 Ultimate 60 dB Phase noise

Front End Selectivity (A - F)	1/2 Octave	C
Image Rejection, 10 MHz (@ 455 kHz IF)	90	dB
First IF Rejection (@ 47.2 MHz IF)	90	dB

Dynamic Range @ 15 MHz, DR 5 kHz:	65	IP3	-35	dBm
Dynamic Range @ 15 MHz. DR 50 kHz	100	IP3	17	dBm

Blocking at 100 kHz	127	dB
Phase Noise (normalized) @ 10 kHz offset:	110	dBc
Loops in synthesizer:	2	

Noise floor, SSB bandwidth @ 10 MHz	-133	dBm
Sensitivity, SSB bandwidth @ 10 MHz	0.13	uV

Noise floor at 2 MHz	-133	dBm
Sensitivity at 2 MHz	0.13	uV

Noise floor at 1 MHz	-126	dBm
Sensitivity at 1 MHz	0.28	uV

Noise floor at 200 kHz	-129	dBm
Sensitivity at 200 kHz	0.2	uV

AGC Threshold at 3 dB:	0.9	uV
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Stability at 10 MHz after 10 second warmup	<<10 Hz
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Comments:

Distortion AM, 60% modulation, narrow and wide bandwidths:

100 Hz	Very slightly	5	%
200 Hz	lower than	5	%
400 Hz	Wide	4	%
1000 Hz	measurements	3	%
2000 Hz		2	%
2500 Hz		1	%

Distortion SSB

100 Hz	0.5	%
200 Hz	0.3	%
400 Hz	0.3	%
1000 Hz	0.2	%
2000 Hz	0.1	%
Other		%

Distortion, Synchronous AM, if available

100 Hz	%
200 Hz	%
400 Hz	%
1000 Hz	%
2500 Hz	%
5000 Hz	%
Other	%

Is distortion similar at record jack as headphone output? Yes

Is uP software battery dependent? No

Gain pots other than AF: RF or IF? No

Attenuators -6/-12 dB

Preamp: No

Audio notches

Fixed frequency: None

Variable, range:

Additional comments: