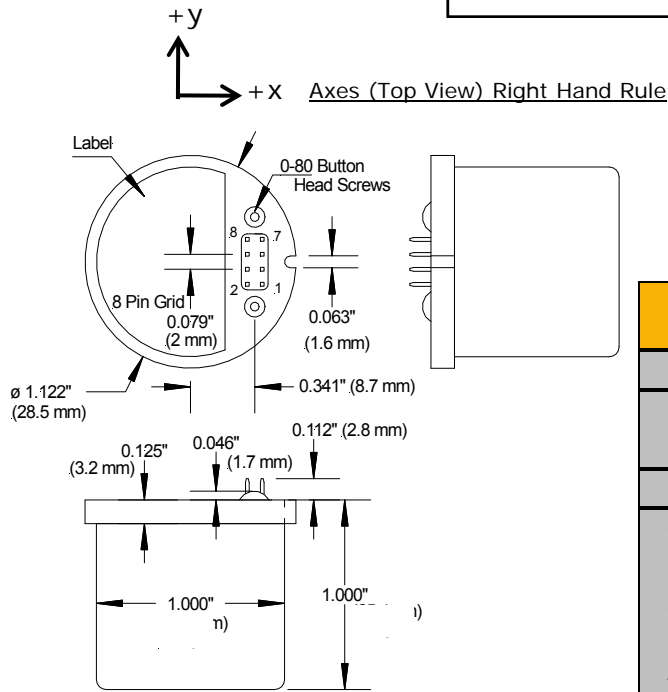


G200 Dual Axis Gyro

G200 Dual Axis Gyro
G200-100-100
G200-300-100

Specification



Pin No.	Pin Assignment
1	X Gyro Rate Output Voltage 0V Nominal
2	Y Gyro Temp +0.75V @ 25°C 10mV/°C
3	Power Ground
4	Y Gyro Rate Output Voltage 0V Nominal
5	+4.75V to +5.25V DC Input
6	Signal Ground
7	Self Test Input 3.3V nominal
8	Case

Rate output X Axis is Pin 1 with respect to Pin 6. Rate output Y Axis is Pin 4 with respect to Pin 6. Temperature is Pin 2 with respect to Pin 6. Self Test On is 3.3V on Pin 7. Self Test Off is open or < 1V. Loads <100pf & >5k on pins 1 & 4 and >40k on pin 2

PARAMETER	G200 Dual Axis Gyro	
	G200-100-100	G200-300-100
Power Requirements		
Input Voltage	+5V DC (±0.25V)	
Input Current <i>Typical (Max)</i>	10mA (14mA)	
Performance		
Standard Full Scale Ranges	±100°/sec	±300°/sec
Full Scale Output (<i>Nominal</i>)	0V ±4.9V DC	
Scale Factor <i>Nominal</i>	40mV/°/sec	12mV/°/sec
Scale Factor Over Temperature	±0.05%	
Temperature Sensor	0.75V ±0.05V DC Nominal at 25°C	
Temperature Sensor Scale Factor	10mV/°C Nominal	
Bias Factory Set 1σ	≤0.05°/sec	≤0.15°/sec
Bias Variation Over Temperature 1σ	≤0.1°/sec	≤0.3°/sec
Short Term Bias Stability 1σ (<i>50 sec at constant temp.</i>)	≤0.001f°/sec	≤0.0028°/sec
	4°/hr	10°/hr
Long Term Bias Stability (<i>1 Year</i>)	≤0.1°/sec	≤0.3°/sec
G-Sensitivity 2σ	≤0.005°/sec/g	
Axis Alignment 1σ	4 mrad 1σ	
Start-Up Time	<5 msec	
Bandwidth (-3 dB)	200 Hz	
Non-Linearity (<i>of Full Range</i>)	≤0.25%	
Threshold/Resolution	≤0.001°/sec	
Output Noise 1σ	0.002°/sec/√Hz	0.003°/sec/√Hz
Environments		
Operating Temperature	-40°C to +85°C	
Storage Temperature	-55°C to +100°C	
Vibration Operating	6 gRMS (20Hz to 2KHz)	
Shock	500g, any axis 2msec 1/2 sine	
Weight	18 grams	

Specification subject to change without notice



Gladiator Technologies
 High Performance Inertial MEMS

Gladiator Technologies, Inc.
 8022 Bracken Place SE
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Rev. 14Jan10
 SN: 310

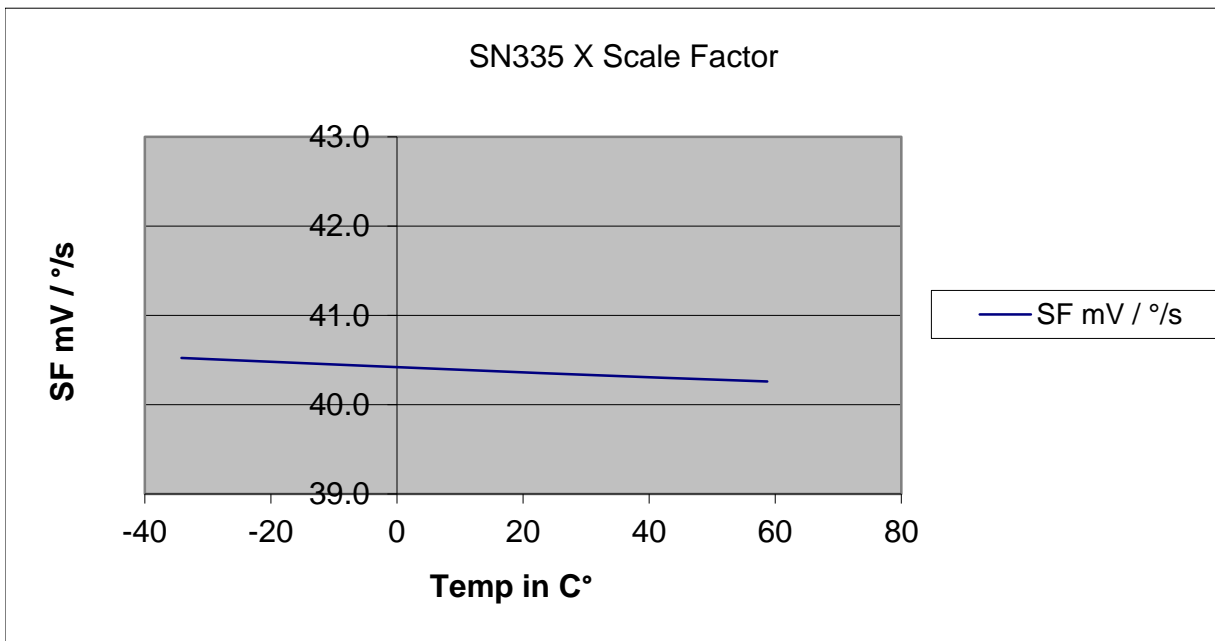
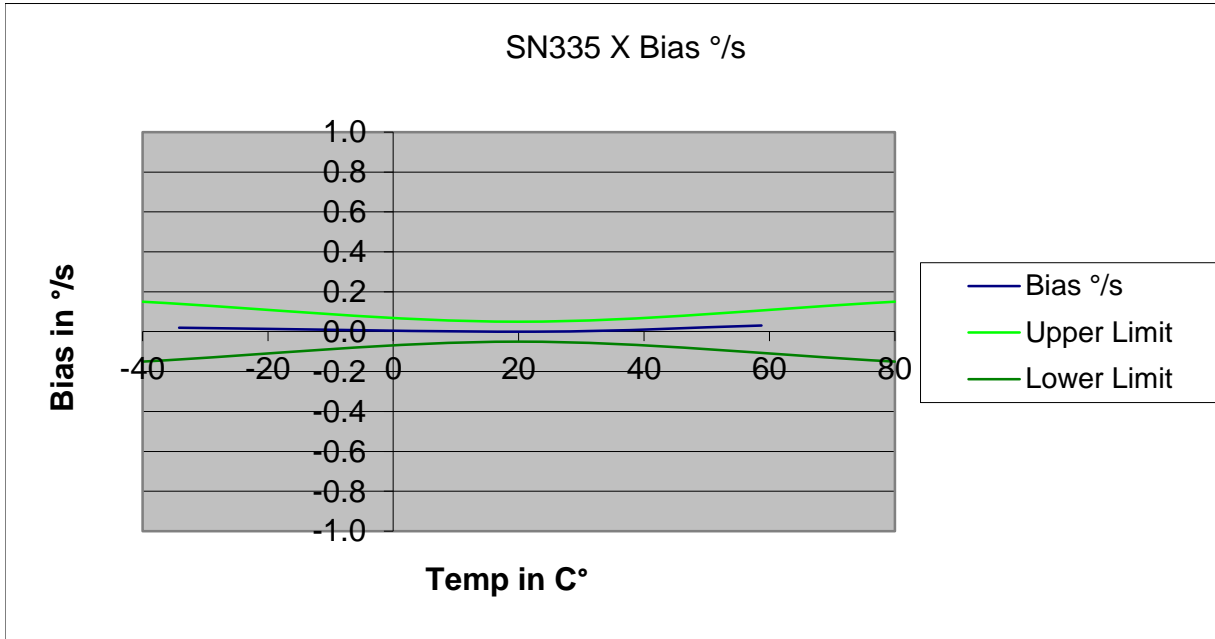
Temp C°	Bias %/s	SF mV / °/s	Temp V
58.7	0.031	40.26	1.0831
22.6	0.000	40.35	0.7125
-34.2	0.020	40.52	0.1643

Mis-Alignment mrad	
3.3	X To Z Axis
-1.7	X To Y Axis

Bias TC =	0.0001	SF TC =	-70	Temp SF=	9.890
	%/s / C°		ppm/C°		mV/°C

G-Sensitivity %/s / g	
0.002	Connector
0.002	Cross
-0.002	Input
0.002	RSS

Temp Bias
@ 20°C= 0.6865 Volts



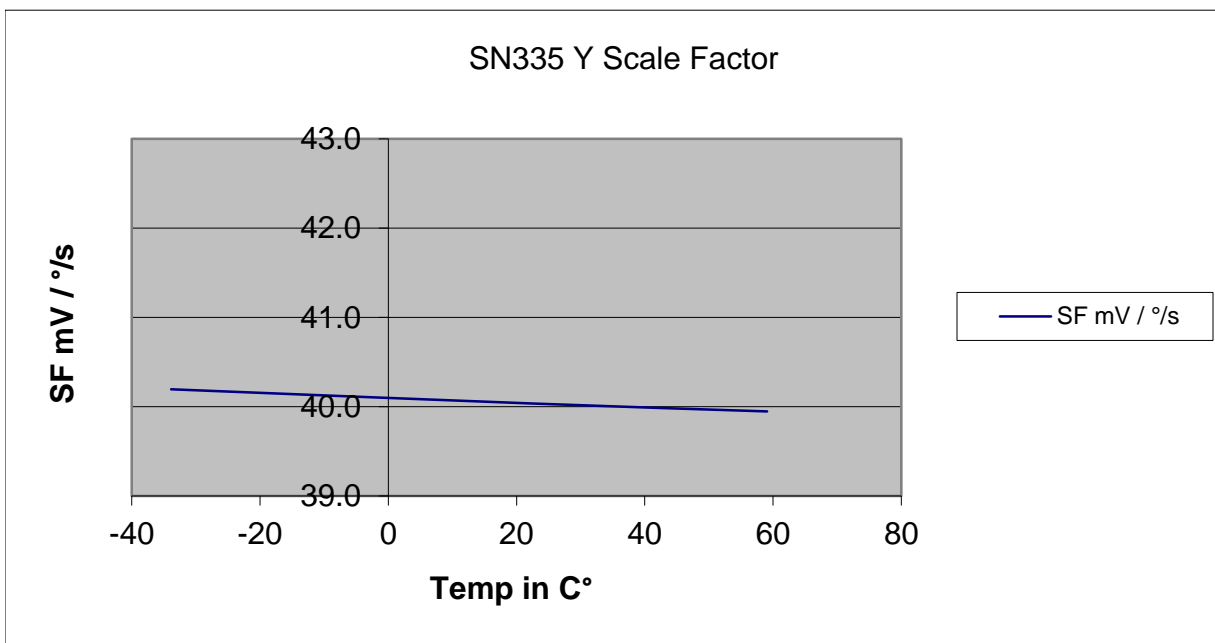
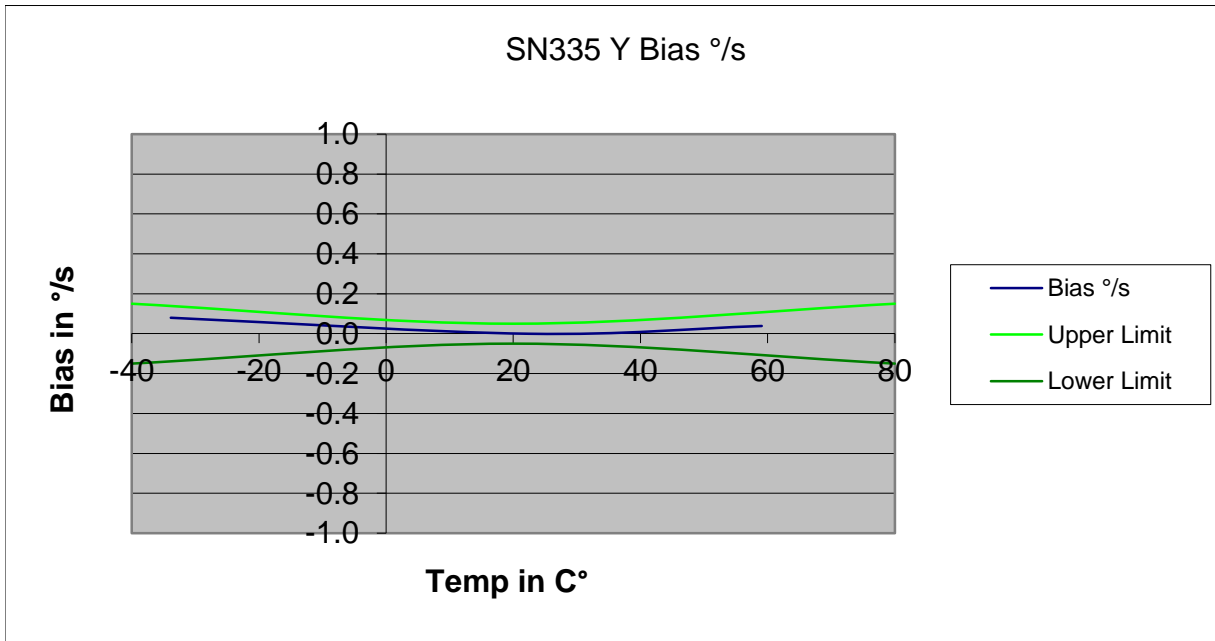
Temp C°	Bias %/s	SF mV / °/s	Temp V
59.1	0.04	39.95	1.0933
22.5	0.00	40.04	0.7149
-33.9	0.08	40.19	0.1654

Mis-Alignment mrad	
-2.2	Y To X Axis
1.2	Y To Z Axis

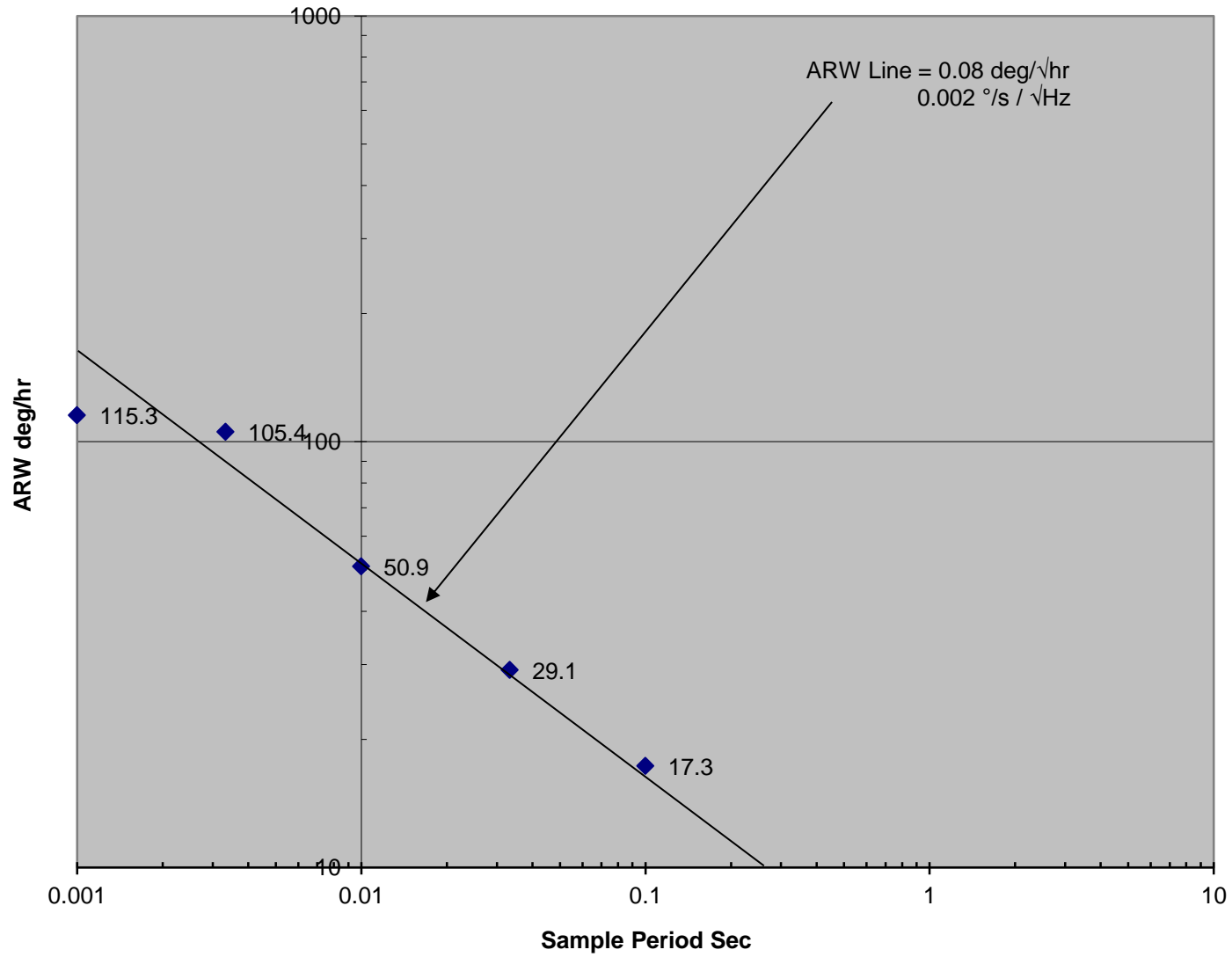
Bias TC =	-0.0004	SF TC =	-67	Temp SF=	9.985
	°/s/ C°		ppm/C°		mV/°C

G-Sensitivity %/s / g	
-0.003	Connector
0.004	Cross
-0.005	Input
0.004	RSS

Temp Bias
@ 20°C= 0.6904 Volts



Rate Allan Variance



Rate Allan Variance

