

# XV-3510CB

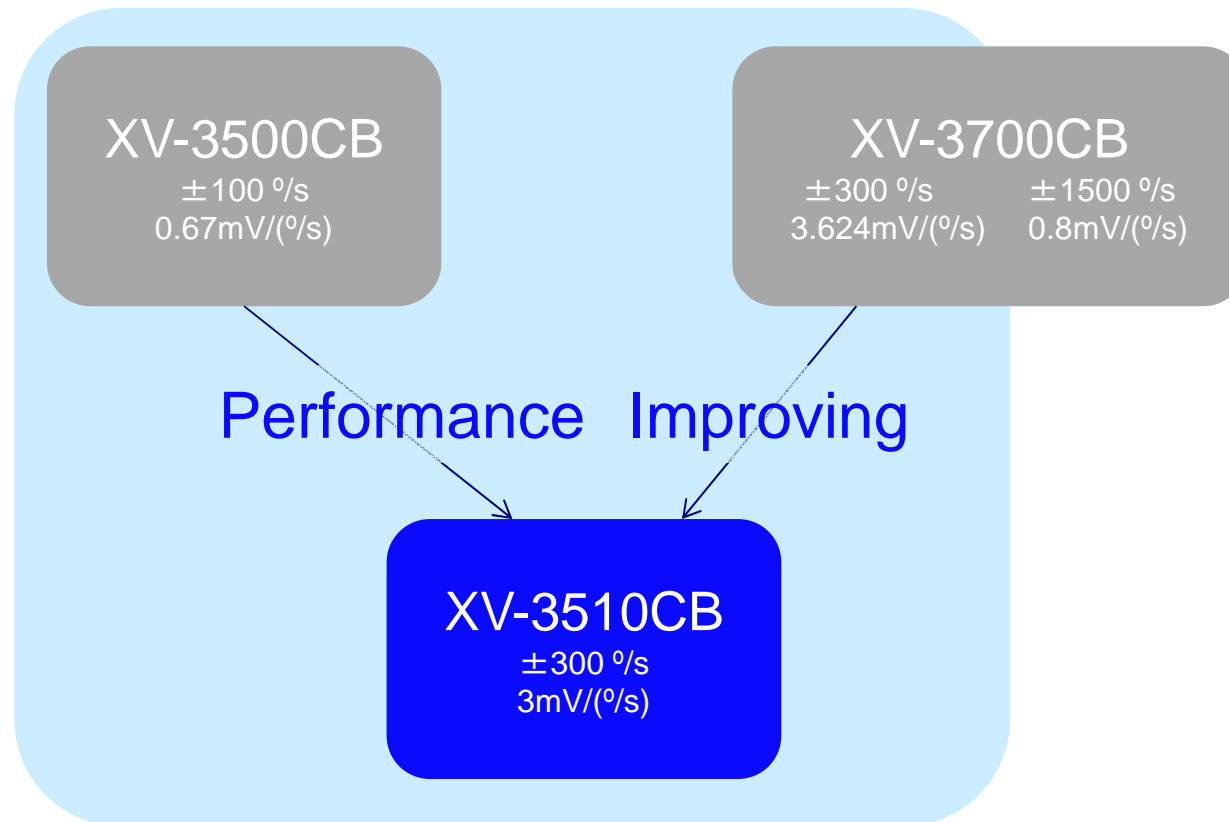
Comparison with XV-3500CB & XV-3700CB

Nov.2011

Microdevices operations division  
Sensing system business unit

# About XV-3510CB

Now we have 2 lineup of 3.2x5.0mm size gyroscope, XV-3500 and XV-3700.



We will release a new lineup as performance improving model, XV-3510.  
We recommend XV-3510 for new design.  
We don't have a plan to stop producing existing models.

# XV-3510/3700/3510 Characteristic



Basic condition without notice VDD=3±0.3V, Ta=-20~+80°C

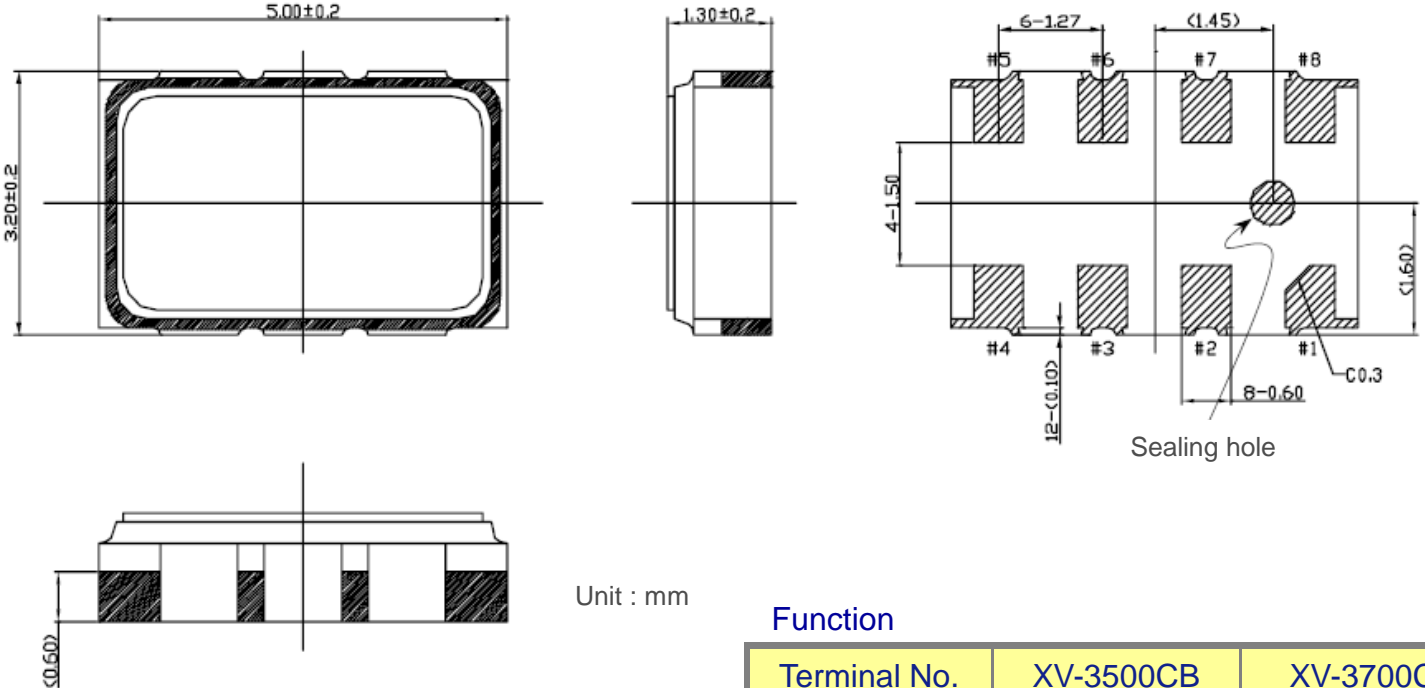
Under Development

Term	Unit	Condition	XV3500CB	XV3700CB	XV3510CB
Drive frequency	kHz	—	46.5/50.3	46.5/50.3/54.1	46.5/50.3/54.1
Scale factor	mV/(°/s)	—	0.67	0.8(Vo1) 3.624(Vo2)	3
Initial scale factor accuracy	%	Ta=+25°C	±5.0	±8.0	±5.0
Scale factor variation with temp.	%	VDD=3V, Ta=+25°C as normal	±5.0	±5.0	±3.0
Bias	mV	Ta=+25°C	VREF±50	1500±50	VREF±20
Bias variation with temp	mV	VDD=3V, Ta=+25°C as normal	±50	±50(Vo1) ±100(Vo2)	±25
Reference voltage	mV	Ta=+25°C	1350±30	1500±30	1430±20
Reference voltage variation with temp.	mV	VDD=3V, Ta=+25°C as normal	±30	±30	±15
Rate range	°/s	—	±100	±150(Vo1) /±300(Vo2)	±300
Non linearity	% FS	Ta=+25°C	±5	±5	±0.5
Band width	Hz	Phase delay 90°	200	200	200
Phase delay	°	20 Hz phase delay angle	-4	-8	-9
Current consumption	mA	Active mode	1.7	2.2	2.2
		Sleep mode	1.0	-	-
Start up time	ms	VDD=3V, Ta=+25°C	240	—	150
Resonance frequency disparity	Hz	—	800±300	(800)	800±300

All specifications of XV-3510 may be changed without notice.

Confidential

# XV-3510/3700/3510 PIN connection



Material of terminal electrode : W  
Finish of terminal electrode : Ni, Au Coated

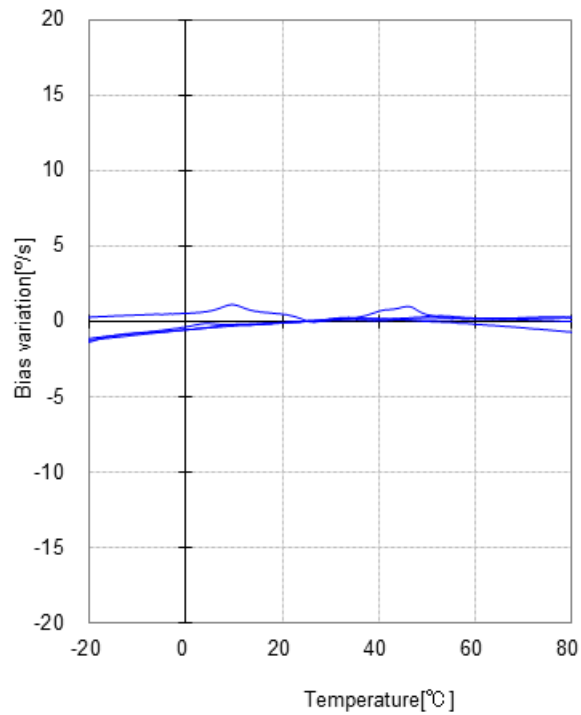
**Function**

Terminal No.	XV-3500CB	XV-3700CB	XV-3510CB
1	N.C.		
2	N.C.		
3	N.C.		
4	GND		
5	Vout (Vo1)		
6	Vref		
7	Sleep	Vo2	N.C.
8	VDD		

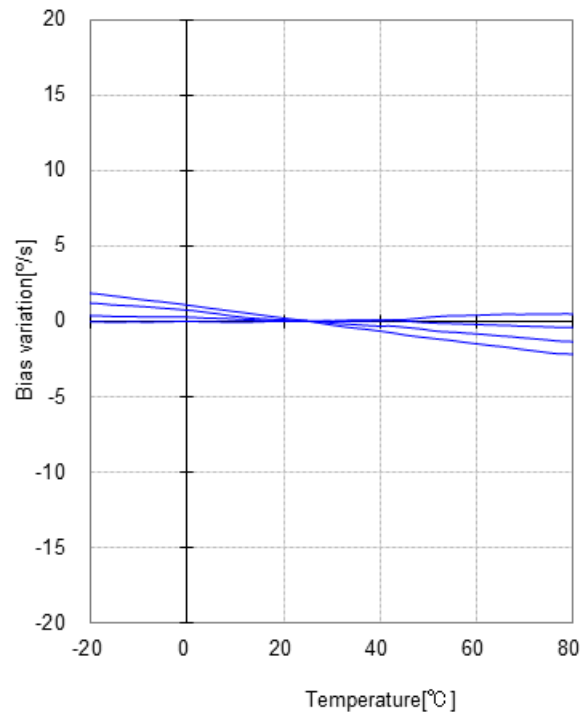
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# Characteristic ; Bias vs. Temperature

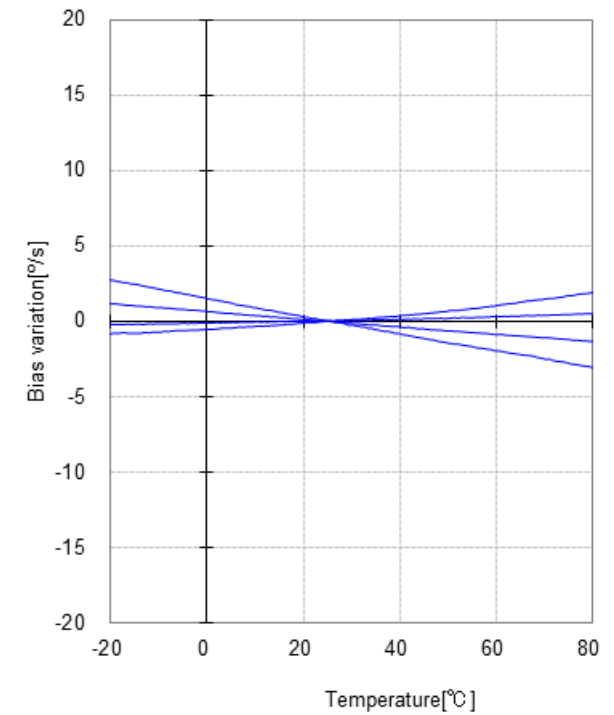
**XV-3510CB**



**XV-3500CB**



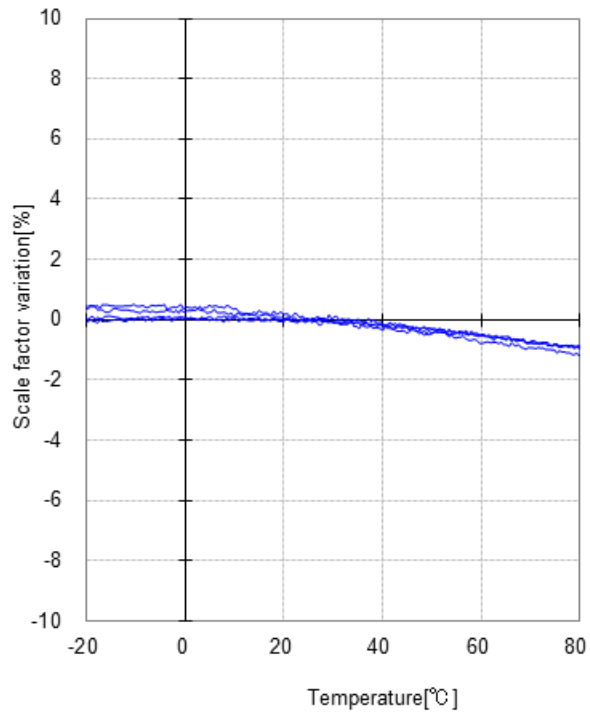
**XV-3700CB**



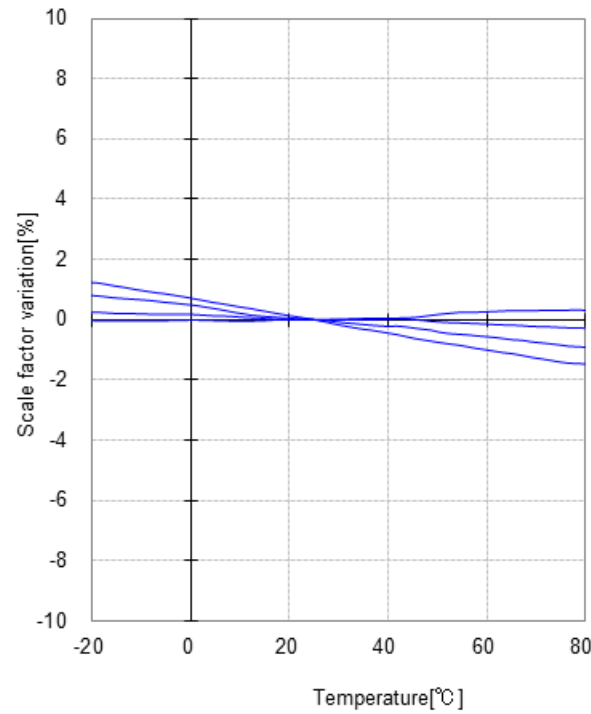
測定条件; Ta=25°C, VDD=3V

# Characteristic ; Scale factor vs. Temperature

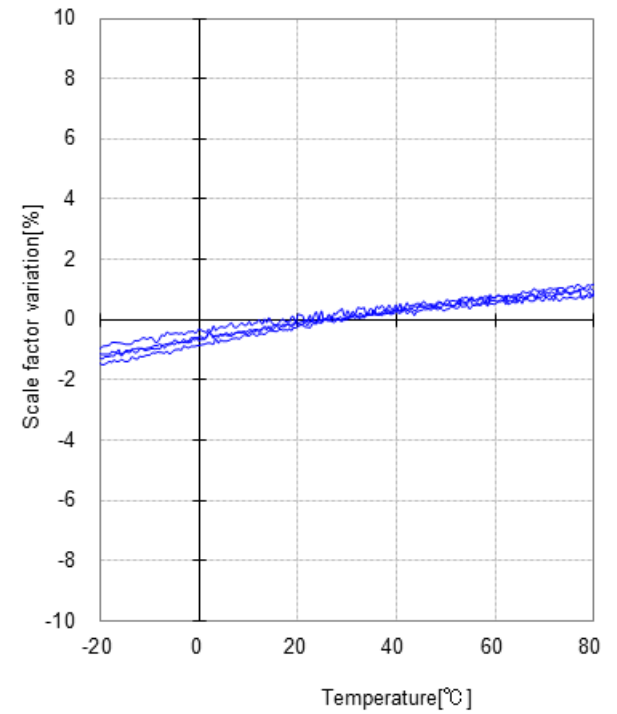
**XV-3510CB**



**XV-3500CB**

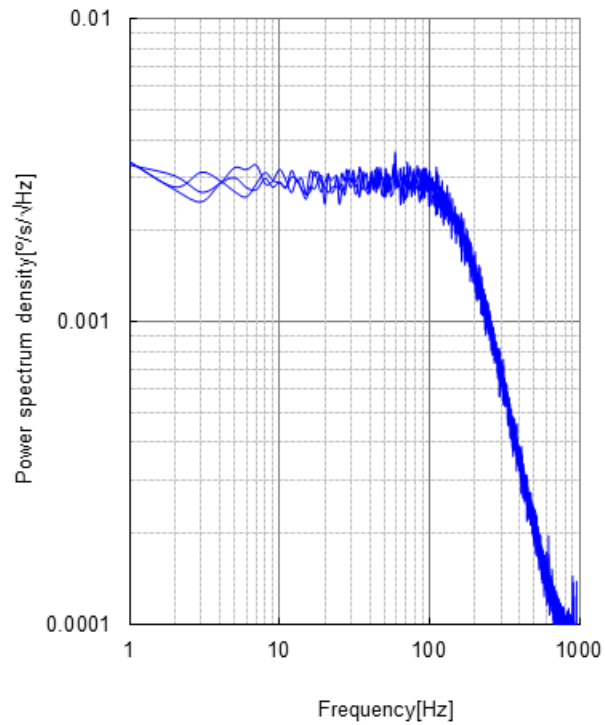


**XV-3700CB**

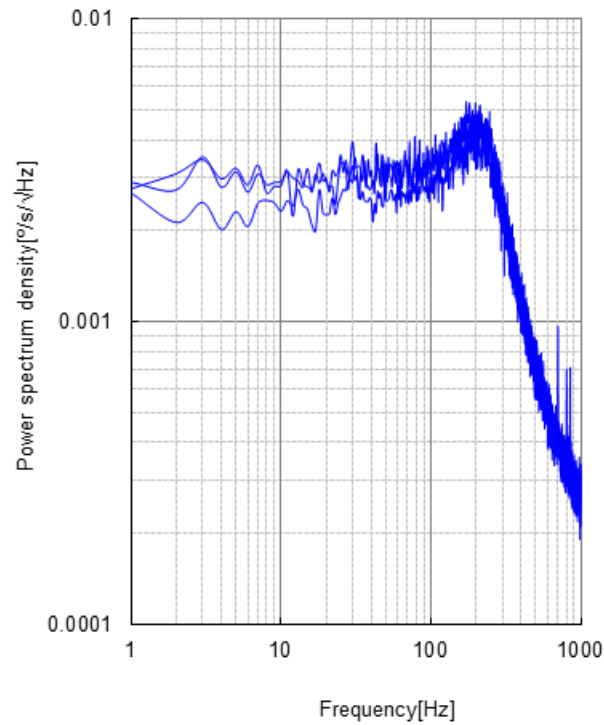


# Characteristic ; Noise density

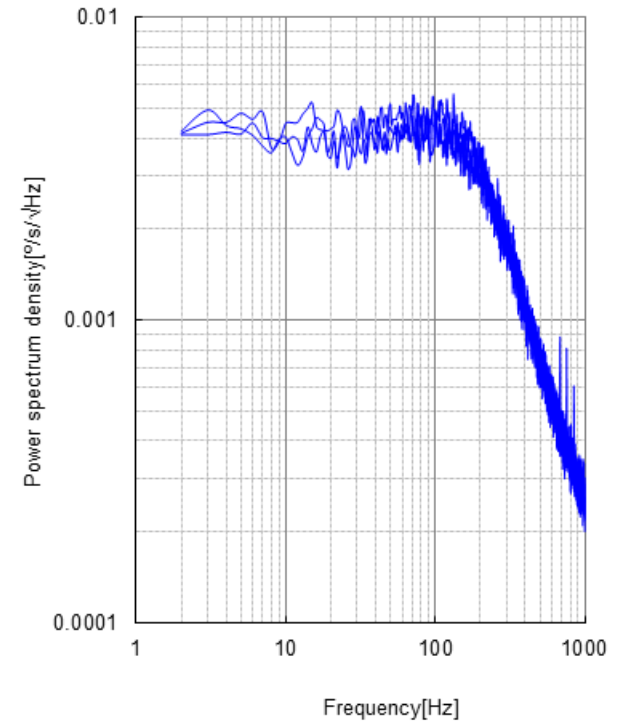
**XV-3510CB**



**XV-3500CB**



**XV-3700CB**



# Schedule

CY	2011	2012				2013			
	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
XV-3500CB	MP								
XV-3700CB	MP								
XV-3510CB		TS	Develop		ES	MP			

Now we can provide test sample of XV-3510CB.