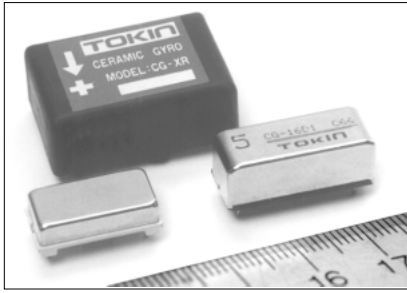


## Ceramic Gyros



Ceramic Gyros are miniature angular rate sensors having a very simple construction made of a single piezoelectric ceramic column printed with electrodes.

Ceramic gyros are piezoelectric vibratory gyroscopes developed as angular rate sensors for use in vehicle navigation systems.

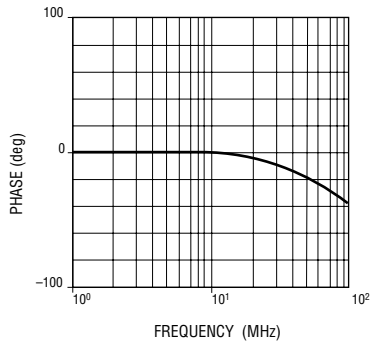
High sensitivity, stability, and reliability are achieved by improvements in processing accuracy of the vibrator, design considerations for the configuration of electrodes, and adoption of a high-stability supporting method.

### Features

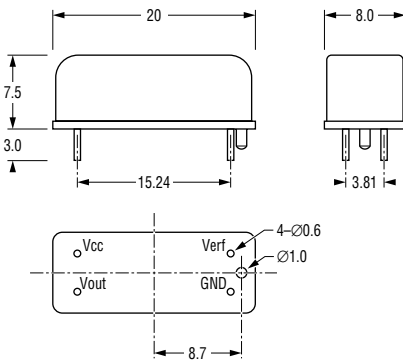
- Sealed construction provides counter-measures against moisture and gas.
- Silicon rubbers effect highly stable all-around support
- Unaffected by external magnetic fields
- Miniature size, high speed response

### Applications

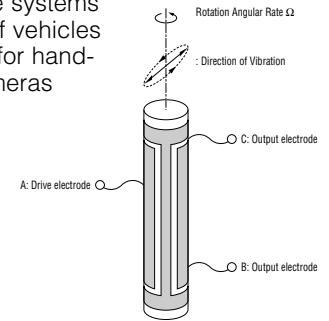
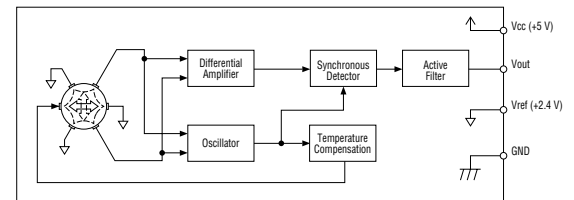
- Vehicle navigation systems
- Four-wheel drive systems
- Motion control of vehicles
- Shake detector for hand-held video cameras



### Dimensions – CG16 Series



### Circuit Construction



## Specifications

	Unit	Condition	CG-16D	CG-XR (Tentative)	CG-XN (Tentative)
Supply Voltage	V		+5	+5	+5
Reference Voltage	V		+2.4	+2.5	+2.5
Current Consumption	mV/A max.		7	9	9
Maximum Detectable Angular Rate	deg./sec.	25°C	±90	±250	±60
Sensitivity	mV/deg./sec.	25°C	1.1 ± 20%	6 ± 5%	25 ± 5%
Output Voltage at Zero Angular Rate	mV max.	25°C	±300	±100	±100
		Any. Temp.	±500	±500	±300
Temperature Characteristics of Sensitivity	%		±15	±10	±10
Frequency Response	Hz	-90°	100	-	-
		-3dB	-	50	20
Operating Temperature	°C		-5 ~ 75	-40 ~ 90	-40 ~ 90
Storage Temperature	°C		-40 ~ 80	-55 ~ 125	-55 ~ 125
Self Test Function			-	Yes	(Yes)
Dimensions	mm		8 × 8 × 20	18 × 28 × 11	20 × 16.5 × 23