



G-4085 ME

Miniature, lightweight, one axis measuring, 2-axis Free Gyro, actuated by spring stored energy. Operates for at least 150 seconds. Specially designed to meet the need for short & medium range high-acceleration missions. Special high-accuracy rotary encoder allows continuous measurement up to 360° at rotation speed up to 1800°/sec. The G-4085 ME has RS-422 digital output. Inner and outer gimbals have freedom of 360°. A remote electrical pulse is used to actuate a pressure squib for uncaging the spring. See applications in printable version.



Specifications

Output Mode	Angle
Angle Measurement Range	360⁰
Active Rotating Measure Range	<1800º / sec
Max. Drift (Scorsby/Random Vibration/Continuous Rotation)*	
Time	Angle
30 sec	0.59
60 sec	1.19
90 sec	1.6º
120 sec	2.2º
150 sec	4.09
<150 msec	Ready Time
Non-contact Rotary Encoder	
Input Voltage	5 VDC ±5%
Input Current	40mA
Output	RS-422
Active Range	±180º (0-360º)
Resolution	8192 PPR (13 bits)
Accuracy	±0.5º
Differential Nonlinearity	<0.1º RMS
NOTE: Evaluation Board & Software available.	

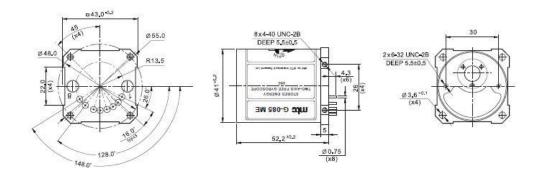


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Specifications

Squib Parameters		
Uncage Current	3.0 Amp. min.	
Resistance	0.16 -0.20 Ohm	
Environmental		
Temperature	-40º to +85ºC	
Mechanical Shock	250 G, 50 msec / all axes	
(operational)	160 G, 150 msec / all axes	
Random Vibration		
Non-Operating	4.5 GRMS	
Operational	0.8 GRMS	
Weight		
170 gr		
* Max drift and operating time depend on rotation range.		

Drawing



All dimensions are in mm

For Additional Information

To learn more about the G-4085 Free Gyroscope Or other MTC products,

Contact MTC on +972 4 998 7772 or email marketing@mtcind.com