

FIBER OPTIC GYROSCOPE VG910F1

SPECIFICATION

POWER REQUIREMENTS			
Voltage (single supply)	V	+4.75 to 5.25	regulated
Supply Current	A	0.15	min
PERFORMANCE			
Input range	°/s	400	for info
Scale factor (SF)	mV/°/s	7	±15%
Bandwidth	kHz	1	3 ^d order LPF
Angular Random Walk (ARW)	°/√h	0.025	
Output Noise PSD	μV/√Hz	2.6	
Bias, RMS	°/h	1	Allan variance min day-to-day
Bias Offset	mV	< 0.2	typical
Bias OTR	μV/°C	±1	for info
SF, RMS	%	0.01	In run, day-to-day
SF OTR	%/°C	-0.03	typical
Start-up	s	< 0.05	90% of SF
Dissipation	W	0.5	@ 20°C (typical)
ELECTRICAL INTERFACE			
Output voltage	V	±3	
Output Impedance	kOhm	1	
PHYSICAL PARAMETERS			
Dimensions	mm	82 x 82 x 20	ISO 2768-m tolerance
Weight	gram	150	approx.
Volume	cl	10	
Housing material		aluminum alloy	anodizing
Ingress protection class		IP67	
ENVIRONMENT			
Temperature (operating)	°C	-40...+70	
Temperature (endurance)	°C	-55...+85	>2 h, non-operating
Vibration, RMS (endurance)	g	18	20 Hz... 2000 Hz
Output noise on vibration	μV/g·Hz	10	typical @NTE 0.2 g ² /Hz
Acceleration (operational)	g	50	
Shocks	g	450	1 ms, multiple, all directions
Magnetic response	°/h/Gauss	1	typical (X axis)
RELIABILITY			
MTBF	yr	15	humidity conditions applied
Lifetime	yr	15	humidity conditions applied
Temperature sensor TMP36			
Scale Factor	mV/°C	10	
Output Voltage	mV	750	@25°C