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GUANXINGNAV

GNAQE31xAY
Quartz Accelerometer
Datasheet

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GNAQE31xAY High Performance Quartz Accelerometer for Aerospace

Introduction

GNAQE31xAY High Performance Quartz Accelerometer with high reliability, is mainly used in the inertial measurement and test system in the aerospace, aviation fields. It can carry out static test and dynamic test, which is a standard vibration sensor.

Specifications

Parameters	GNAQE311AY-50	GNAQE312AY-50	GNAQE313AY-50	Unit
Range	±50	±50	±50	g
Threshold /Resolution	5	5	5	μg
Bias	≤(±3)	≤(±5)	≤(±7)	mg
Scale factor	1.3±0.2	1.3±0.2	1.3±0.2	mA/g
Class II non-linearity	≤(±20)	≤(±30)	≤(±30)	μg/g ²
Bias repeatability	≤10	≤30	≤50	μg
Factor scale repeatability	≤15	≤30	≤50	ppm
Class II non-linearity repeatability	≤(±10)	≤(±20)	≤(±30)	μg/g ²
Bias temp coefficient	≤(±10)	≤(±30)	≤(±50)	μg/°C
Scale factor temp coefficient	≤(±20)	≤(±30)	≤(±50)	ppm /°C
Noise	≤5	≤8.4	≤8.4	mv
Natural Frequency	400~800	400~800	400~800	Hz
Bandwidth	800~2500	800~2500	800~2500	Hz
Vibration	6g (20-2000Hz)			
Shock	100g, 5ms, 1/2sin			
Operating temperature	-40~85	-40~85	-40~85	°C
Temperature range	-60~120	-60~120	-60~120	°C
Power Voltage	±12~±15	±12~±15	±12~±15	V



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Current	≤(±20)	≤(±20)	≤(±20)	mA
Temp. sensor	Yes and No two type			
Size	Φ25.4X30	Φ25.4X30	Φ25.4X30	mm
Weight	≤80	≤80	≤80	g

Install dimension

