

3273A4

PERFORMANCE SPECIFICATION

REV H, ECN 7336, 01/26/11

Accelerometer, Triaxial, IEPE



Actual Size

- ULTRA LOW FREQUENCY RESPONSE
- ULTRA LOW NOISE LEVEL
- WEIGHT ONLY 2.7 GRAMS

ENGLISH

SI

PHYSICAL

Weight	Type
Mounting	Material
Connector [1]	Isolation
	Material
Housing	Mode
Sensing Element	

0.096	oz	2.7	grams
Adhesive		Adhesive	
4-pin		4-pin	
Ti-6 AL-4V		Ti-6 AL-4V	
Ti-6 AL-4V		Ti-6 AL-4V	
Case ground		Case ground	
Ceramic		Ceramic	
Shear		Shear	

PERFORMANCE

Sensitivity, $\pm 10\%$ [2]	50	mV/g	5.10	mV/m/s ²
Acceleration Range	± 100	Gpeak	± 981	m/s ² peak
Frequency Range, $\pm 15\%$	.3-10,000	Hz	.3-10,000	Hz
Frequency Range, $\pm 5\%$	.5 - 3000	Hz	.5 - 3000	Hz
Phase Response, $\pm 5^\circ$	2.3 to 3000	Hz	2.3 to 3000	Hz
Resonance Frequency	>24	kHz	>24	kHz
Linearity [3]	1	%F.S.	1	%F.S.
Transverse Sensitivity Max	5	%	5	%
Noise floor, Max	0.002	Grms	0.017	m/s ² rms
Spectral Noise	1Hz	$\mu\text{Grms}/\text{sqr}(\text{Hz})$	5150	$\mu\text{m/s}^2 \text{ rms}/\text{sqr}(\text{Hz})$
	10Hz	$\mu\text{Grms}/\text{sqr}(\text{Hz})$	991	$\mu\text{m/s}^2 \text{ rms}/\text{sqr}(\text{Hz})$
	100Hz	$\mu\text{Grms}/\text{sqr}(\text{Hz})$	491	$\mu\text{m/s}^2 \text{ rms}/\text{sqr}(\text{Hz})$
	1000Hz	$\mu\text{Grms}/\text{sqr}(\text{Hz})$	157	$\mu\text{m/s}^2 \text{ rms}/\text{sqr}(\text{Hz})$
	10000Hz	$\mu\text{Grms}/\text{sqr}(\text{Hz})$	98	$\mu\text{m/s}^2 \text{ rms}/\text{sqr}(\text{Hz})$

ELECTRICAL

Supply Current Range [4]	2 to 20	mA	2 to 20	mA
Compliance Voltage Range	+18 to +30	VDC	+18 to +30	VDC
Output Impedance, Typ.	100	Ω	100	Ω
Output Bias Voltage	11 to 13	VDC	11 to 13	VDC
Discharge Time Constant	0.8 to 1.2	sec	0.8 to 1.2	sec

ENVIRONMENTAL

Shock Max	5000	g pk	49050	m/s ²
Vibration Max	3000	g pk	29430	m/s ²
Operating Temperature	-60 to +200	$^\circ\text{F}$	-51 to +93	$^\circ\text{C}$
Seal	Hermetic		Hermetic	
Magnetic Sensitivity at 100 Gauss	0.00007	g/Gauss	0.00069	m/s ² /Gauss
Base Strain Sensitivity	0.02	g/ $\mu\epsilon$	0.1962	m/s ² / $\mu\epsilon$

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp($^\circ\text{F}$)	TC
3273A1	10	500	0.003	-60 to +250	0.8 - 1.2
3273A2	100	50	0.00095	-60 to +165	0.5 - 1.5

Please, refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

1) Accredited calibration certificate (ISO 17025)

Notes:

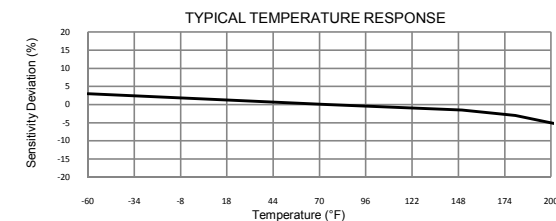
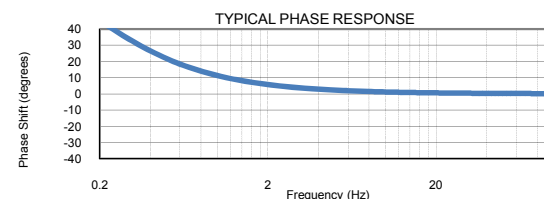
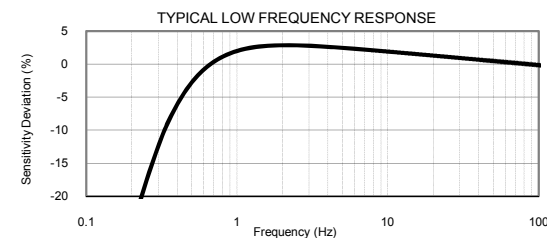
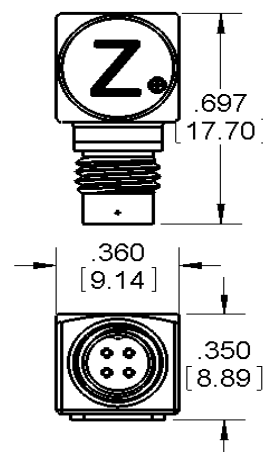
[1] Glass to metal Seal connector. Mates with Dytran cable model 6811AXX or 6824AXX (XX=length in feet)

[2] Measured at 100 Hz, 5 Grms per ISA RP 37.2

[3] Linearity is % of specified full scale (or any less full-scale range), zero-based best fit straight line method.

[4] Do not apply power to this device without current limiting, 20mA Max, to do so will destroy the integral IC amplifier

[5] In the interest of constant product improvement, we reserve the right to change specifications without notice.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3273A for more information.



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax: 818.700.7880
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