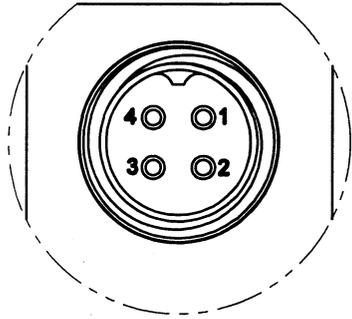


PROPRIETARY AND CONFIDENTIAL

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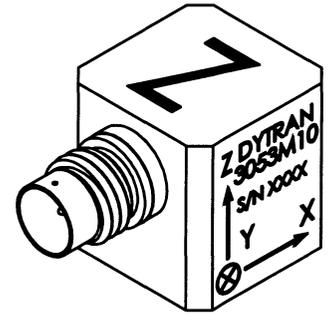
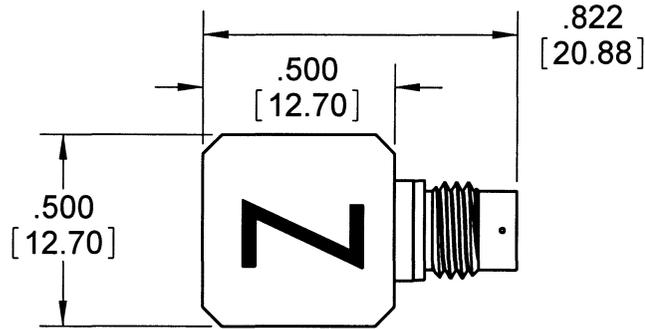
REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	5741	INITIAL RELEASE	JS 02/19/09	JS 2-19-09	AWs



DETAIL A

CONNECTOR PINOUT
 PIN 1 GND RETURN, COMMON
 PIN 2 SIG/PWR AXIS 2 (Y)
 PIN 3 SIG/PWR AXIS 3 (Z)
 PIN 4 SIG/PWR AXIS 1 (X)



6 MATES WITH DYTRAN CABLE 6811AXX & 6824AXX (XX=LENGTH IN FEET).

5 MOUNTING STUD 10-32 UNF-2A (MODEL 6200 SUPPLIED).

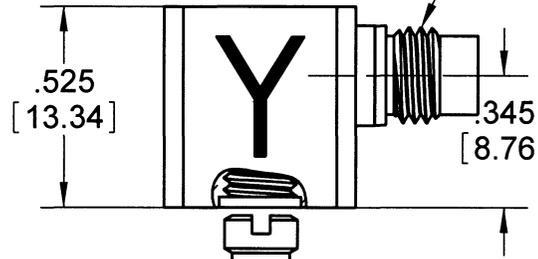
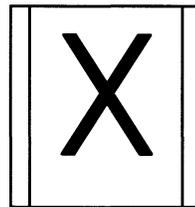
4. ARROWS INDICATE ACCELERATION DIRECTION FOR POSITIVE OUTPUT.

3. HOUSING AND CONNECTOR MATERIAL: TITANIUM

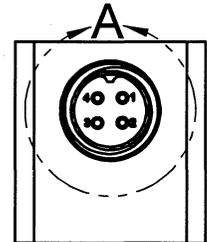
2. WEIGHT: 10 GRAMS APPROX.

1. ENVIRONMENTAL SEAL: HERMETIC

NOTES: UNLESS OTHERWISE SPECIFIED



6



5

MOUNTING RECOMMENDATIONS:
 PREPARE MOUNTING SURFACE FLAT TO .001 TIR.
 DRILL AND TAP 10-32 UNF-2B ∇ .188 [4.76] MINIMUM.
 RECOMMENDED MOUNTING TORQUE: 15 LB IN. +5/-0.
 FOR BEST FREQUENCY RESPONSE MOUNTING SURFACE MUST CONTACT ENTIRE ACCELEROMETER MOUNTING SURFACE.

3053M10	USED ON	NEXT ASSY
APPLICATION		
THIRD ANGLE PROJECTION		
USA		

UNLESS OTHERWISE SPECIFIED:
 INTERPRET DIM & TOL PER ASME Y14.5M - 1994.
 REMOVE BURRS.
 COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA.
 CHAM EXT THDS 45° TO MINOR DIA.
 THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS.
 THDS PER MIL-S-7742.
 DIMENSIONS APPLY AFTER FINISHING.

63

ALL MACHINED SURFACES TOTAL RUNOUT WITHIN .005.
 BREAK SHARP EDGES .005 TO .010.
 MACHINED FILLET RADII .005 TO .015.
 WELDING SYMBOLS PER AWS A2.4.
 ABBREVIATIONS PER MIL-STD-12

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS
 TOLERANCES ARE:
 INCHES METRIC ANGLES
 .XX ± .03 .X ± 0.8 ± 1°
 .XXX ± .010 .XX ± 0.25

MATERIAL

FINISH

DO NOT SCALE DRAWING

CONTRACT NO.		
APPROVALS		DATE
ORIG	JS	02/09/09
CHK	JS	2-19-09
APP	AWs	2/18/09
APP		

MASTER ONLY IF IN RED

Chatsworth, CA

TITLE: **OUTLINE/INSTALLATION DRAWING, 3053M10**

SIZE A	CAGE CODE 2W033	DWG. NO. 127-3053M10	REV A
SCALE: 4:1	SOLIDWORKS	SHEET 1 OF 1	

MODEL NUMBER
3053M10

PERFORMANCE SPECIFICATION

DOC NO.
PS3053M10

TRIAxIAL ACCELEROMETER, IEPE

REV F, ECN 15403, 11/08/19



- **TRIAxIAL ACCELEROMETER**
- **HERMETICALLY SEALED**
- **INTERNALLY CASE GROUND ISOLATED**

PHYSICAL

Weight
Mounting [1]
Connector [2]
Material

ENGLISH			SI	
0.26	oz		7.5	grams
10-32 Tapped hole			10-32 Tapped hole	
4-Pin			4-Pin	
Titanium Alloy			Titanium Alloy	

PERFORMANCE

Sensitivity, $\pm 5\%$ [3]
Range F.S. (each axis)
Frequency Response, $\pm 10\%$
Normal Frequency, NOM
Equivalent Electrical Noise Floor
Linearity [4]
Transverse Sensitivity, Max.
Signal Polarity

ENGLISH			SI	
10	mV/g		1.02	mV/ m/s ²
± 500	g		± 4900	m/s ²
1.1 to 5000	Hz		1.1 to 5000	Hz
30	kHz		30	kHz
0.007	g rms		0.0686	m/s ² rms
$\pm 1\%$	%F.S		$\pm 1\%$	%F.S
5%			5%	
[5]			[5]	

ENVIRONMENTAL

Maximum Vibration
Maximum Shock
Temperature Range
Seal
Coefficient Of Thermal Sensitivity

ENGLISH			SI	
± 600	g		± 5880	m/s ² pk
5000	\pm gpk		49000	\pm m/s ² pk
-60 to +250	°F		-51 to 121	°C
Hermetic			Hermetic	
0.03	%/°F		0.054	%/°C

ELECTRICAL

Supply Current [6]
Compliance Voltage Range
Output Impedance TYP
Bias Voltage
Discharge Time Constant
Ground Isolation

ENGLISH			SI	
2 to 20	mA		2 to 20	mA
18 to +30	V		18 to +30	V
100	Ω		100	Ω
7 to 9	VDC		7 to 9	VDC
0.3 to 1.0	sec		0.3 to 1.0	sec
10	M Ω		10	M Ω

This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC

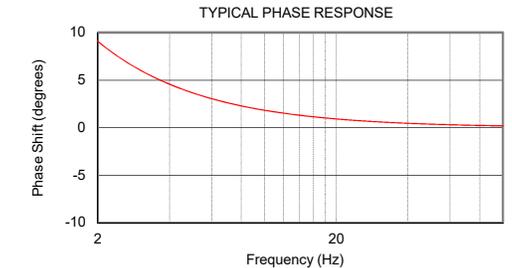
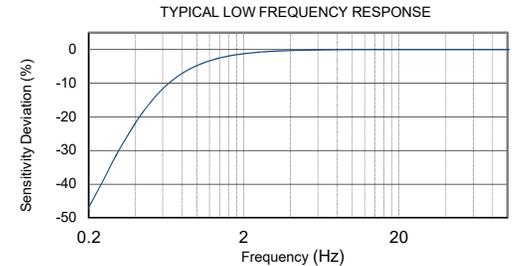
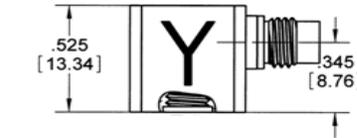
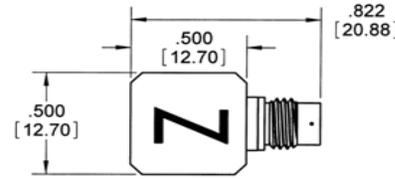
Please, refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories

1) Model 6200 mounting stud 10 - 32 UNF - A2.

Notes:

- [1] Case ground isolation is achieved by internal means.
- [2] Connector mates with Dytran cable assemblies. Model 6811AXX AND 6824AXX. (XX = length in feet)
- [3] Sensitivity measured at 100 Hz, 1 grams per ISA RP 37.2.
- [4] Measured using zero-based best straight-line method, % of F.S. or any lesser range.
- [5] Positive in motion in direction of arrows etched on housing.
- [6] Do not apply power to this device without current limiting, 20 mA MAX.
To do so will destroy the integral IC amplifier.
- [7] In the interest of constant product improvement, we reserve the rights to change the specifications without notice. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3053M10 for more information.



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