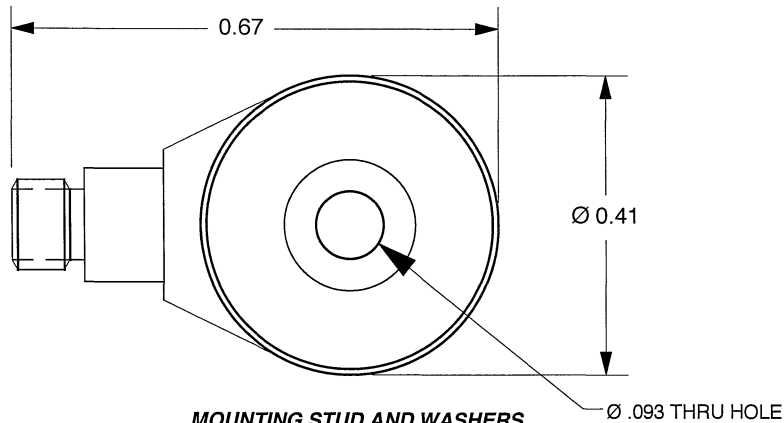


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REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	6747	INITIAL RELEASE	RA, 04/26/10	JS	<i>[Signature]</i>

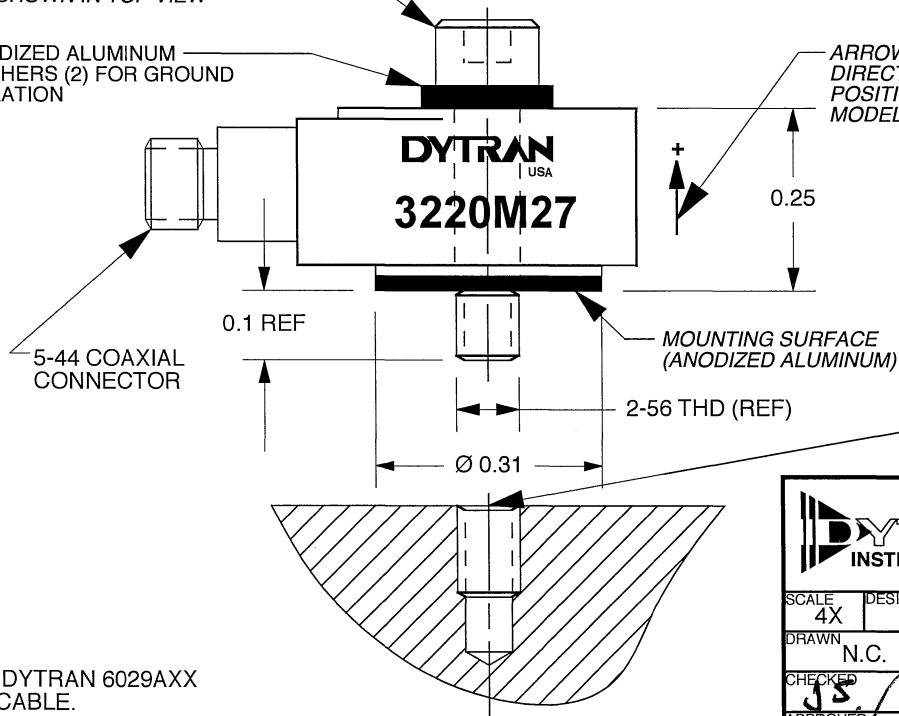


MODEL 6165 MOUNTING SCREW
 ASSY
 (REMOVABLE)
 NOT SHOWN IN TOP VIEW

**MOUNTING STUD AND WASHERS
 NOT SHOWN IN THIS VIEW**

ANODIZED ALUMINUM
 WASHERS (2) FOR GROUND
 ISOLATION

ARROW INDICATES SENSE AND
 DIRECTION OF ACCELERATION FOR
 POSITIVE GOING OUTPUT SIGNAL FOR
 MODEL 3220M27.



MOUNTING SURFACE PREPARATION

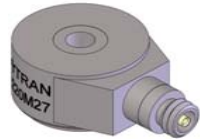
1. PREPARE (OR SELECT) A FLAT MOUNTIN SURFACE OF AT LEAST .32 DIAMETER. SURFACE SHOULD BE FLAT TO .001 TIR FOR BEST HIGH FREQUENCY RESPONSE.
2. AT THE CENTER, DRILL #50 (Ø .070) X .20 DEEP.
3. TAP #2-56 UNC-2B X .125 MIN DEPTH.
4. CLEAN THE AREA CAREFULLY AFTER MACHINING TO REMOVE ALL CHIPS AND CUTTING OILS.

3. MATES WITH DYTRAN 6029AXX OR 6040AXX CABLE.
2. HOUSING/CONNECTOR MATERIAL: TITANIUM
1. WEIGHT: 2.7 GRAMS APPROX.

NOTES: UNLESS OTHERWISE SPECIFIED.

DYTRAN INSTRUMENTS, INC.		MASTER ONLY IF IN RED		CHATSWORTH, CA.	
SCALE 4X	DESIGN N.C.	DATE 7/19/02			
DRAWN N.C.	DATE 4/26/10	PART NO. MODEL 3220M27			A
CHECKED JS	DATE 04/27/10	MAT'L			
APPROVED BV	DATE 5/3/10	NEXT ASSEMBLY	USED ON MODEL 3220M27		
TITLE OUTLINE/INSTALLATION DRAWING MODEL 3220M27 MINIATURE ACCELEROMETER				DWG NO. 127-3220M27	
SHEET 1 OF 1					

	IEPE ACCELEROMETER	REV A, ECN 6747, 04/23/10
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- HERMETICALLY SEALED
- EXCELLENT LINEARITY

PHYSICAL

Weight
Connector, Radially Mounted
Mounting Provision
Material, Housing/Connector
Sensing Element

ENGLISH		SI	
	0.09	oz	2.7
Type	5-44	g	49050
Thru Hole	[5]	Hz	0.6 to 10000
	TITANIUM	kHz	>33
	QUARTZ	Grms	0.031

PERFORMANCE

Sensitivity, ±10% [1]
Range for ± 5 Volts Output
Frequency Response, ± 5%
Resonant Frequency
Broad Band Resolution
Linearity [2]
Maximum Transverse sensitivity
Strain Sensitivity @ 250µε

	1	mV/g	0.10	mV/m/s ²
Range for ± 5 Volts Output	5,000	g	49050	m/s ²
Frequency Response, ± 5%	0.6 to 10000	Hz	0.6 to 10000	Hz
Resonant Frequency	>33	kHz	>33	kHz
Broad Band Resolution	0.0032	Grms	0.031	m/s ² rms
Linearity [2]	±1	% F.S.	±1	% F.S.
Maximum Transverse sensitivity	5	%	5	%
Strain Sensitivity @ 250µε	0.03	g/µε	0.29	m/s ² /µε

ENVIRONMENTAL

Maximum Vibration
Maximum Shock
Temperature Range
Seal

	1500	Gpeak	14715	m/s ² peak
Maximum Shock	2000	Gpeak	19620	m/s ² peak
Temperature Range	-60 to +250	°F	-51 to +121	°C
Seal	HERMETIC		HERMETIC	

ELECTRICAL

Supply Current Range [3]
Compliance Voltage Range
Output Impedance, Max
Bias Voltage
Discharge Time Constant
Electrical Isolation

	2 to 20	mA	2 to 20	mA
Compliance Voltage Range	+18 to +30	Volts	+18 to +30	Volts
Output Impedance, Max	100	Ω	100	Ω
Bias Voltage	9 to 11	VDC	9 to 11	VDC
Discharge Time Constant	0.8 to 1.2	Sec	0.8 to 1.2	Sec
Electrical Isolation	10	GΩ,min	10	GΩ,min

This family also includes:

Model	Sensitivity (mV/g)	Frequency Response (Hz)	Time Constant (Sec)	Operating Temp (°F)

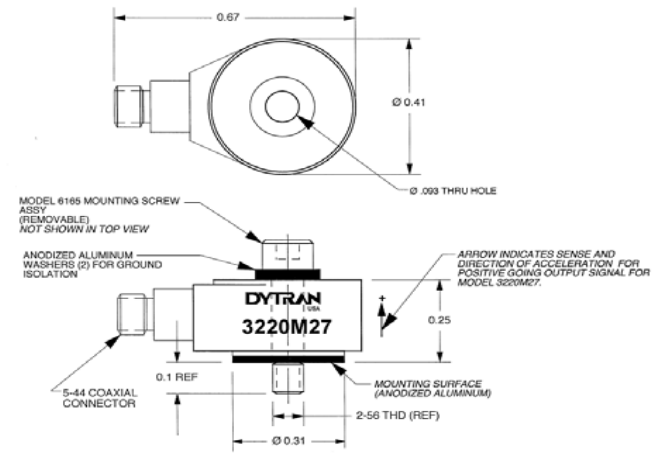
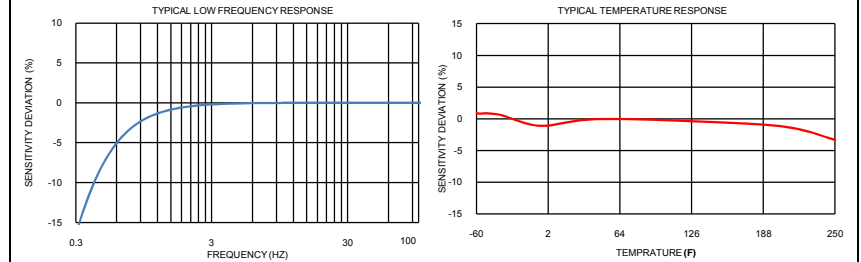
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] Measured at 100Hz, 1 Grms per ISA RP 37.2.
- [2] Measure using zero-based straight line method, % of F.S. or any lesser range.
- [3] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier.
- [4] In the interest of constant product improvement, we reserve the right to change specifications without notice.
- [5] For # 2 mounting screw.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3220M27 for more information.

