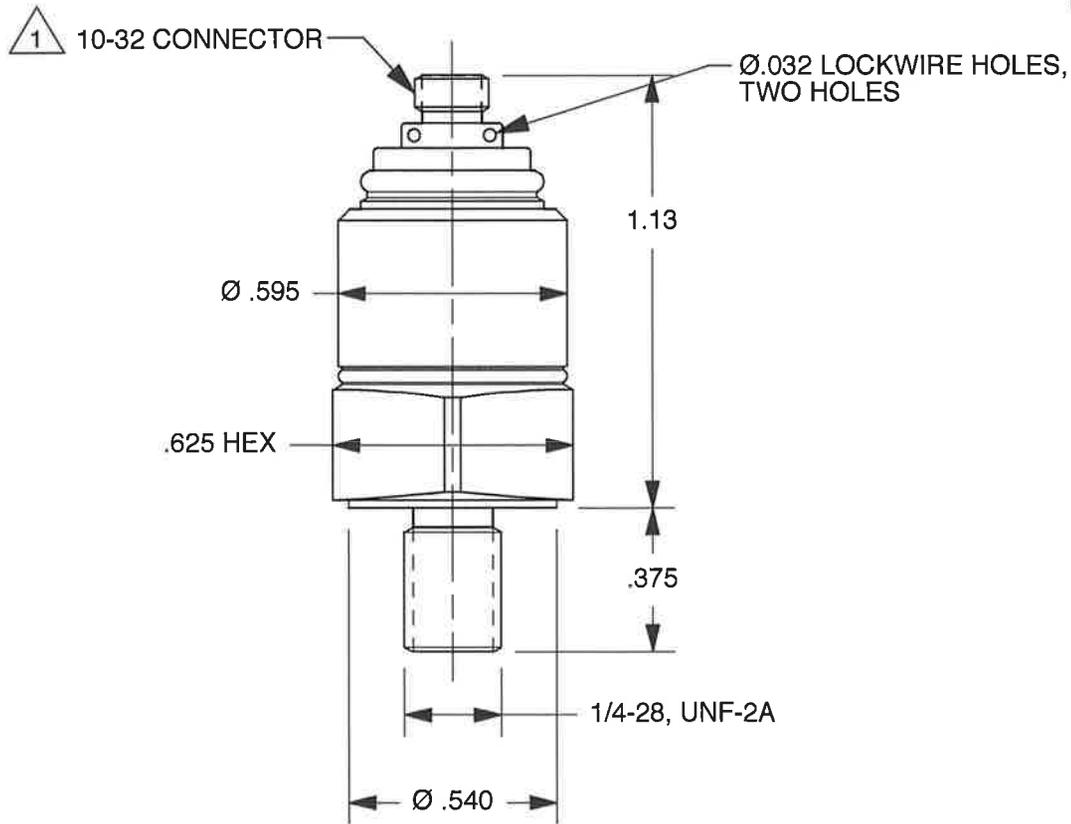


DYTRAN PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYTRAN INSTRUMENTS, INC. AND ANY REPRODUCTION IN PART OR AS A WHOLE OR ANY OTHER DISSEMINATION OF THIS INFORMATION WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS, INC. IS PROHIBITED.

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
-	-	INITIAL RELEASE-	NC/5-13-99	<i>lap</i>	



PORT PREPARATION:
 PREPARE FLAT SURFACE OVER .560 MIN. DIAMETER, FLAT TO .0005 TIR.
 AT CENTER, DRILL #3 (Ø.213) X .475 DEEP, MIN.
 TAP 1/4-28 UNF-2B X .425 DEEP, MIN.

1 THE CONNECTOR SHELL (SIG/PWR GROUND) IS ISOLATED FROM THE BODY OF THE ACCELEROMETER BY > 10 MEGOHMS.

EXCEPT AS OTHERWISE NOTED	
ALL DIMENSIONS IN INCHES TOLERANCE: .xxx = ± .005	.xx = ± .01
SURFACE FINISH EXCEPT AS NOTED	✓
BREAK EDGES TO DEBURR RADIUS OR CHAMFER	
△ THESE DIAS ⊙ TO	T.I.R.
FILLETS -	MAX RAD.

DYTRAN INSTRUMENTS, INC.		MASTER ONLY IF IN RED		CHATSWORTH, CA.	
SCALE 2X	DESIGN N.C.	DATE 5/13/99			
DRAWN N.C.	DATE 5/13/99	PART NO. MODEL 3045A			
CHECKED R.A.	DATE 5/13/99	MAT'L		REV -	
APPROVED	DATE	NEXT ASSEMBLY	USED ON 3045A		
TITLE OUTLINE/INSTALLATION DRAWING, MODEL 3045A				DWG NO. 127-3045A	
				SHEET 1 OF 1	

Model Number 3045A	PERFORMANCE SPECIFICATION	DOC NO PS3045A
	HIGH FREQUENCY IEPE QUARTZ SHEAR ACCELEROMETERS	REV A, ECN 10952, 07/20/15



- LOW TEMPERATURE APPLICATION
- EXCELLENT LINEARITY
- ELECTRICALLY ISOLATED
- HERMETICALLY SEALED

PHYSICAL

Weight
Connector, Coaxial
Mounting Provision : Integral Stud
Material : Base, Cap, and Connector
Element Material, Style

ENGLISH		SI	
0.70	oz	20	grams
10-32		10-32	
1/4 - 28 UNF-2A		1/4 - 28 UNF-2A	
300 Series S.S.		300 Series S.S.	
Quartz, Shear		Quartz, Shear	

PERFORMANCE

Sensitivity, ±5% [1]
Range F.S for ± 5 Volts Output
Frequency Range ±3db
Filter Rolloff Rate
Filter Corner Frequency
Resonant Frequency
Noise floor
Linearity [2]
Maximum Transverse sensitivity
Strain Sensitivity

5	mV/g	0.51	mV/m/s ²
±1000	g	± 9810	m/s ²
1.6 to 2500	Hz	1.6 to 2500	Hz
12	db/octave	12	db/octave
2,500	Hz	2,500	Hz
>35	kHz	>35	kHz
0.007	Grms	0.069	m/s ² rms
± 1%	% F.S.	± 1%	% F.S.
5	%	5	%
0.002	g/μσ	0.02	m/s ² /μσ

ENVIRONMENTAL

Maximum Vibration
Maximum Shock
Temperature Range
Seal
Coefficient of Thermal Sensitivity

±1000	G's,peak	±9810	m/s ² peak
±2000	G's,peak	±19620	m/s ² peak
-320 to +300	°F	-195 to +149	°C
Hermetic		Hermetic	
.03	%/°F	0.05	%/°C

ELECTRICAL

Supply Current Range [3]
Compliance Voltage Range
Output Impedence, Typ
Bias Voltage
Discharge Time Constant
Output Signal Polarity for Acceleration Towards Top
Electrical Isolation, Ground (Pin B) to case (pin A)

2 to 4	mA	2 to 4	mA
+ 28	Volts	+ 28	Volts
100	Ω	100	Ω
+7.5 to +9.5	VDC	+7.5 to +9.5	VDC
0.1 to 1.0	Sec	0.1 to 1.0	Sec
Positive		Positive	
10	GΩ,min	10	GΩ,min

This family also includes:

Model	Sensitivity	Range F.S ± 5 Volts	Max Vibration/Shock	Resonant Frequency

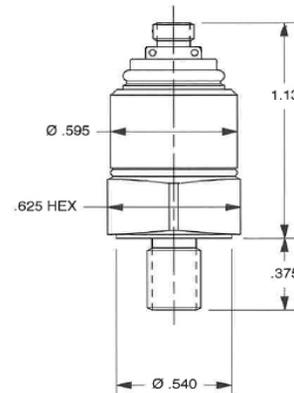
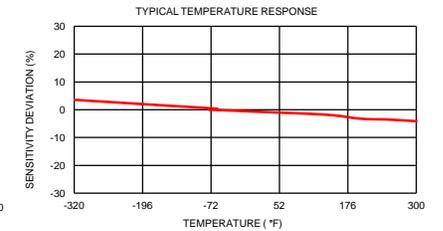
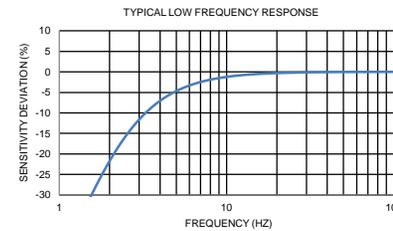
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

Notes:

- [2] Measured using zero-based best straight line method, %F.S., or any lesser range.
- [3] Do not apply power to this device without current limiting, 20 mA MAX. To do so will destroy the integral IC amplifier.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3045A for more information.



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax: 818.700.7880 www.dytran.com
For permission to reprint this content, please contact info@dytran.com