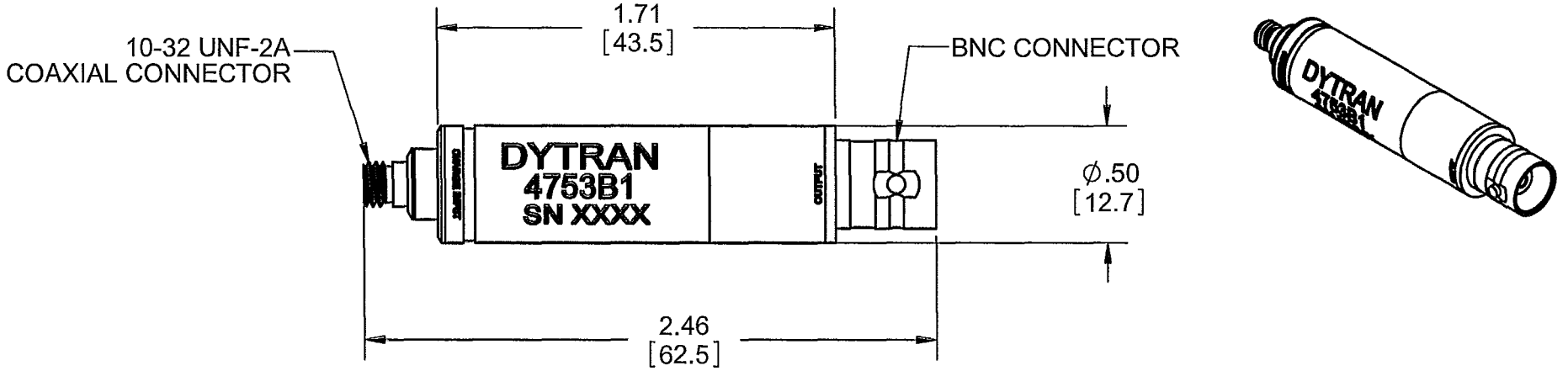
REVISIONS

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	8486	INITIAL RELEASE	LN, 04/04/12	JS	ANS
B	10129	SEE ECN	AB 07/03/13	MH	



4. MATERIAL, BNC CONNECTOR: NICKEL PLATED
3. MATERIAL, HOUSING/10-32 CONNECTOR: 300 SERIES STAINLESS STEEL
2. WEIGHT: 25 GRAMS, MAX.
1. SENSITIVITY: 1.0 mV/pC (±3%)

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	LN	04/04/12
CHK	JS	04/05/12
APP	ANS	04/18/12
APP		7/9/13

DYTRAN INSTRUMENTS, INC.
Chatsworth, CA

MASTER
ONLY IF IN RED

TITLE:
OUTLINE/INSTALLATION DRAWING, MODEL 4753B1

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	127-4753B1	B

SCALE: NONE | SOLIDWORKS | SHEET 1 OF 1

172-0081, REV C

Model Number 4753B1	PERFORMANCE SPECIFICATION		DOC NO PS4753B1
		CHARGE AMPLIFIER, IN-LINE	REV G, ECN 15185, 06/28/19

- **FAST TURN ON TIME**
- **HIGH TEMPERATURE SENSORS**
- **MINIATURE PACKAGE**
- **TOLERATES LOW INSULATION RESISTANCE FROM SENSORS**

		ENGLISH		SI	
PHYSICAL					
Weight, Max		0.88	oz	25	grams
Input Connector [1]	Type	10-32		10-32	
Output Connector	Type	BNC Jack		BNC Jack	
Housing	Material	300 Series S.S		300 Series S.S	
	Isolation	Case Grounded		Case Grounded	
PERFORMANCE					
Sensitivity, ±3% [2]		1.0	mV/pC	1.0	mV/pC
Input Range		5000	pC	5000	pC
Frequency Range, ±5%	4mA	5 to 40,000	Hz	5 to 40,000	Hz
Output voltage range		+/-5	Vp	+/-5	Vp
Non-Linearity [3]		+/-1%	%F.S.	+/-1%	%F.S.
Noise floor (5Hz to 10kHz)		40	µVrms	40	µVrms
Maximum Input Voltage		30	Vp	30	Vp
Minimum Source Resistance		10	kΩ	10	kΩ
Maximum Source Capacitance		20000	pF	20000	pF
Turn on Time (within 10% of bias)		<1	minute	<1	minute
Thermal coefficient of sensitivity, Max		0.01	%/°F	0.02	%/°C
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		10 to 13	VDC	10 to 13	VDC
Discharge Time Constant		0.1 to 0.3	sec	0.1 to 0.3	sec
Polarity		Inverting		Inverting	
ENVIRONMENTAL					
Shock Max		2000	g pk	19620	m/s^2
Vibration Max		300	g pk	2943	m/s^2
Operating Temperature		-40 to +185	°F	-40 to +85	°C
Seal		Epoxy		Epoxy	
Radiation Exposure Limit (Integrated Neutron Flux)		1.0E+10	N/cm^2	1.0E+10	N/cm^2
Radiation Exposure Limit (Integrated Gamma Flux)		1.0E+06	rad	1.0E+06	rad

This family also includes:

Model	Sensitivity (mV/pC)	Range (pC)	Resolution (µVrms)	Oper. Temp(°F)	TC
4753B	10.0	500	40	-40 to +185	0.1 to 0.3
4753B2	5.0	1000	40	-40 to +185	0.1 to 0.3

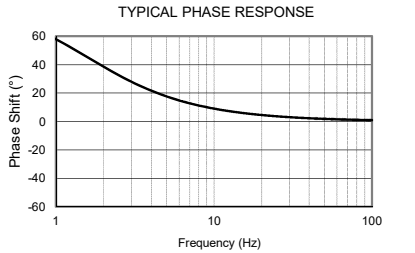
Refer to the performance specifications of the products in this family for detailed description

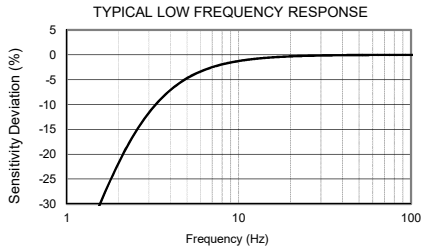
Supplied Accessories:

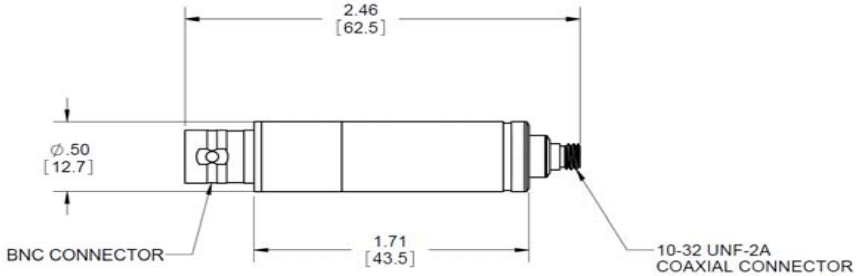
1) Accredited calibration certificate (ISO 17025)

Notes:

[1] Glass to metal seal connector, type 10-32 coaxial receptacle.
[2] Measured at 100 Hz, 1000 pF input.
[3] Percent of full scale or any lesser range, zero based best-fit straight line method.
[4] Do not apply power to this system without current limiting, 20 mA 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.
[6] In the interest of constant product improvement, we reserve the right to change 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 127-4753B1 for more information.

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