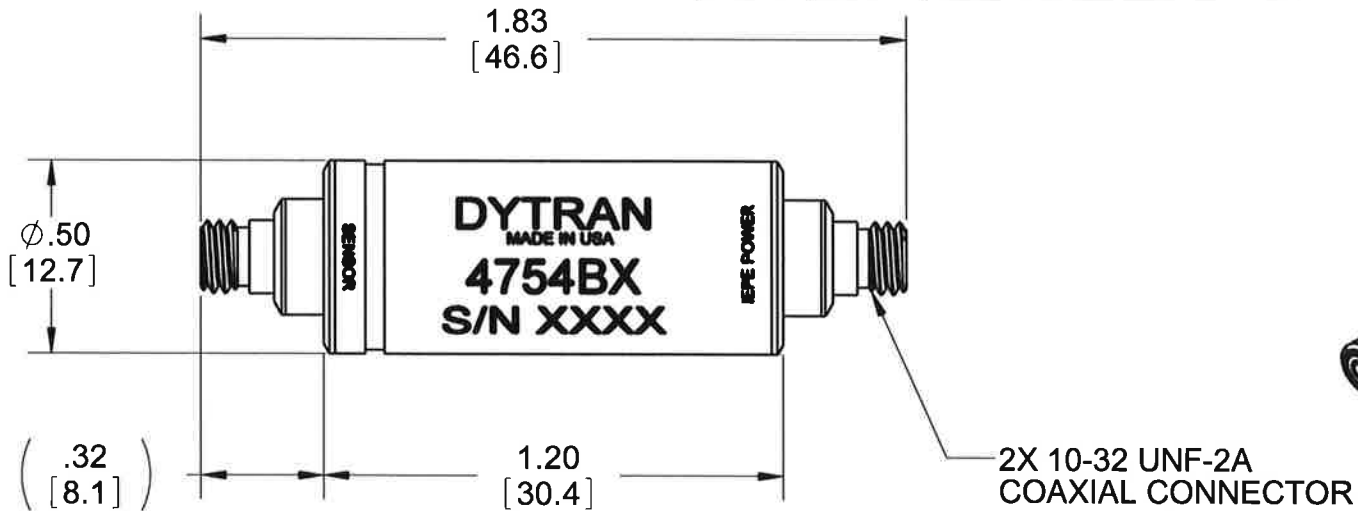


**PROPRIETARY AND CONFIDENTIAL**

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REVISIONS				
REV	ECN	DESCRIPTION	BY/DATE	CHK APPR
A	9021	INITIAL RELEASE	LN 01/25/13	JS DV
B	12317	ADDED 4754B1 & 4754B2	LN 11/03/15	<i>[Signature]</i> <i>[Signature]</i>



MODEL	SENSITIVITY
4754B	10mV/pC
4754B1	0.1mV/pC
4754B2	1.0mV/pC

- 3. SENSITIVITY: SEE TABLE
- 2. MATERIAL, HOUSING/CONNECTOR: 300 SERIES STAINLESS STEEL
- 1. WEIGHT, MAX : 17 GRAMS

NOTES: UNLESS OTHERWISE SPECIFIED

<p>UNLESS OTHERWISE SPECIFIED:          INTERPRET DIM &amp; 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.</p>		<p>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</p>		<p>CONTRACT NO.</p>		<p><b>MASTER</b>  <b>DYTRAN</b> ONLY IF IN RED          INSTRUMENTS, INC. Chatsworth, CA</p>	
<p>USED ON NEXT ASSY</p>		<p>MATERIAL</p>		<p>APPROVALS DATE</p>		<p>TITLE:          OUTLINE/INSTALLATION DWG,          IN-LINE CHARGE AMP, LOW          CURRENT &amp; IR, MODEL 4754B</p>	
<p>APPLICATION          THIRD ANGLE PROJECTION USA</p>		<p>FINISH</p>		<p>ORIG LN 08/23/12</p>		<p>SIZE CAGE CODE DWG. NO. REV  <b>A</b> <b>2W033</b> <b>127-4754B</b> <b>B</b></p>	
<p>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.</p>		<p>DO NOT SCALE DRAWING</p>		<p>CHK JS 01/30/13</p>		<p>SCALE: NONE SOLIDWORKS SHEET 1 OF 1</p>	
				<p>APP DV 06/26/13</p>			
				<p>APP <i>[Signature]</i> 11/9/15</p>			

<b>Model Number</b> 4754B	<b>PERFORMANCE SPECIFICATION</b>		<b>DOC NO</b> PS4754B
	<b>CHARGE AMPLIFIER, IN-LINE</b>		REV F, ECN 15185, 06/28/19



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

		ENGLISH		SI	
<b>PHYSICAL</b>					
Weight, Max		0.60	oz	17	grams
Input Connector [1]	Type	10-32		10-32	
Output Connector	Type	10-32		10-32	
Housing	Material	300 Series		300 Series	
	Isolation	Case Grounded		Case Grounded	
<b>PERFORMANCE</b>					
Sensitivity, ±3% [2]		10	mV/pC	10	mV/pC
Input Range		500	pC	500	pC
Frequency Range, ±5%	2mA	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
<b>ELECTRICAL</b>					
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		10.0 to 13.0	VDC	10.0 to 13.0	VDC
Discharge Time Constant		0.1 to 0.3	sec	0.1 to 0.3	sec
Polarity		Inverting		Inverting	
<b>ENVIRONMENTAL</b>					
Shock Max		2000	g pk	19620	m/s <sup>2</sup>
Vibration Max		300	g pk	2943	m/s <sup>2</sup>
Operating Temperature		-40 to +185	°F	-40 to +85	°C
Seal		HERMETIC		HERMETIC	
Radiation Exposure Limit (Integrated Neutron Flux)		1.0E+10	N/cm <sup>2</sup>	1.0E+10	N/cm <sup>2</sup>
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
4754B1	0.1	50,000	40	-40 to +185	0.1 to 0.3
4754B2	1	5,000	40	-40 to +185	0.1 to 0.3

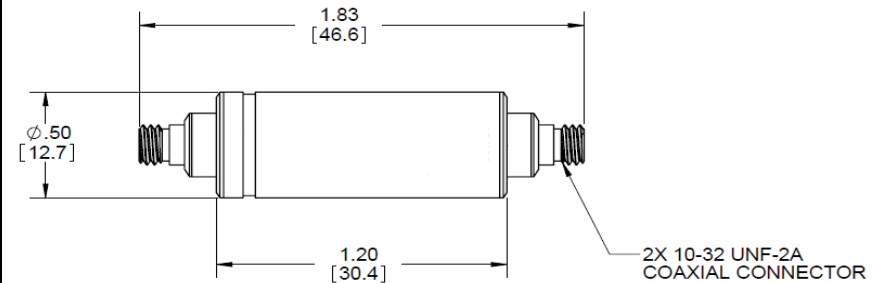
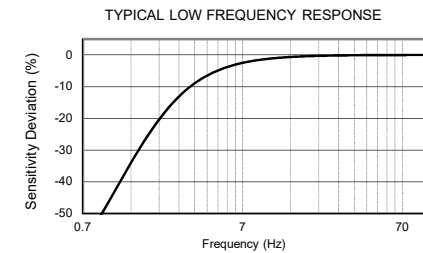
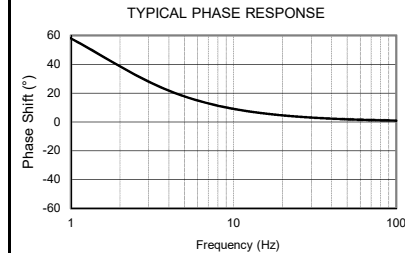
Refer to the performance specifications of the products in this family for detailed description

**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. 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 127-4754B for more information.



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