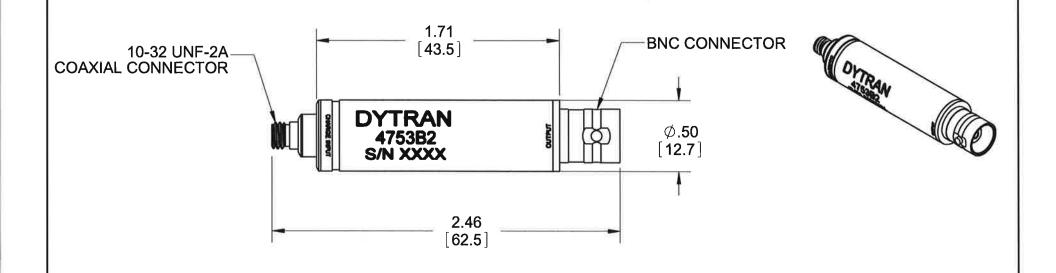
PROPRIETARY AND CONFIDENTIAL

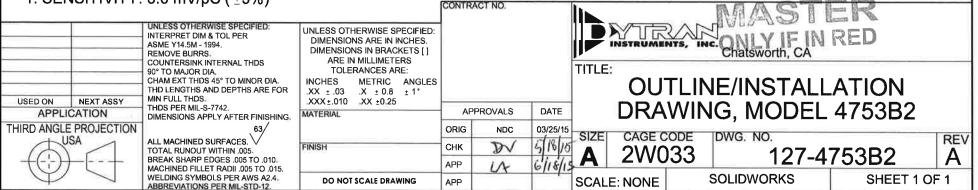
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| REVISIONS | | | | | |
|-----------|-------|-----------------|--------------|-----|------|
| REV | ECN | DESCRIPTION | BY/DATE | CHK | APPR |
| Α | 11376 | INITIAL RELEASE | NDC 03/25/15 | LA | 90 |



- 4. MATERIAL, BNC CONNECTOR: NICKEL PLATED
- 3. MATERIAL, HOUSING/10-32 CONNECTOR: 300 SERIES STAINLESS STEEL
- 2. WEIGHT: 25 GRAMS, MAX.

1. SENSITIVITY: 5.0 mV/pC (±5%)



| Model Number 4753B2 | F | PERFORMANCE SPECIFICATION | | DOC NO PS4753B2 |
|------------------------|---|---------------------------|--|----------------------------|
| | | CHARGE AMPLIFIER, IN-LINE | | REV D, ECN 15185, 06/28/19 |



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

| | | ENGLISH | | SI | | |
|--------------------------------|------------|----------------|-------------------|----------------|-------------------|--|
| PHYSICAL | | LINGLISH | | | ,, | |
| Weight, Max | | 0.88 | oz | 25 | grams | |
| Input Connector [1] | Type | 10-32 | OZ. | 10-32 | grams | |
| Output Connector | Type | BNC Jack | | BNC Jack | | |
| Housing | Material | 300 Series S.S | | 300 Series S.S | | |
| liousing | Isolation | Case Grounded | | Case Grounded | | |
| | isolation | Case Grounded | | Case Grounded | | |
| PERFORMANCE | | | | | | |
| Sensitivity, ±3% [2] | | 5.0 | mV/pC | 5.0 | mV/pC | |
| Input Range | | 1000 | рĊ | 1000 | рĊ | |
| 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 Capacitan | ce | 20000 | pF | 20000 | pF | |
| Turn on Time (within 10% of | bias) | <1 | minute | <1 | minute | |
| Thermal coefficient of sensiti | ivity, 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 | | Ероху | | |
| Radiation Exposure Limit | | | 2 | | 2 | |
| (Integrated Neutron Flux) | | 1.0E+10 | N/cm ² | 1.0E+10 | N/cm ² | |
| Radiation Exposure Limit | | 4.05.00 | | 4.05.00 | | |
| (Integrated Gamma Flux) | | 1.0E+06 | rad | 1.0E+06 | rad | |
| 1 | | | | | | |

| This | family | , also | includes: |
|-------|--------|--------|-----------|
| 11113 | Idilli | , aisu | miciaacs. |

| The family also included. | | | | | | |
|---------------------------|--------|---------------------|------------|--------------------|----------------|------------|
| | 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 |
| | 4753B1 | 1.0 | 5000 | 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.

