

172-0081, REV C

| Model Number | DOC NO PERFORMANCE SPECIFICATION DOC NO PS7600B3 | | | | | | | | | | |
|---|--|--|-----------------------------|------------------------|---------------------|--|---------------------------|----------------------------|---|---------------------------------------|--------------------------------|
| 7600B3 | | | | | | | | | | | PS7600B3 |
| VARIABLE CAPACITANCE ACCELEROMETER This family also includes: | | | | | | | | | | | REV C, 7424, 03/25/11 |
| STORE STATE | | • POWER SUPPLY IDENTICAL TO STRAIN GAGE SENSORS • VARIABLE CAPACITANCE ACCELEROMETER • DIFFERENTIAL MODE • HERMETICALLY SEALED • DC RESPONSE | | | | Model | Input Range (g) | Frequency response (Hz) | Sensitivity Differential, ±15% (mV/g) | Max.Shock (0.1ms) | Noise Differential (μg/vHz) |
| | | | | | | 7600B1 | ±5 | 0-600 | 100 | 2000 | 9 10 |
| | | | | | | 7600B2 7600B4 | ±10 ±50 | 0-1000 0-2000 | 50.0 10.0 | 2000 2000 | 50 |
| | | | | | | 7600B4 7600B5 | ±30 ±100 | 0-2500 | 5.0 | 2000 | 100 |
| | | | | | | 7600B5 | ±200 | 0-3000 | 2.5 | 2000 | 200 |
| | | | | | | 100020 | 1200 | 0 0000 | 2.0 | 2000 | |
| | | ENGLISH SI | | | | Please, refer to the performance specifications of the products in this family for detailed description | | | | | ription |
| PHYSICAL | | | <u>_</u> _ | | | Supplied A | ccessories: | | | | |
| Weight, Max | | 0.1 | oz | 3.6 | grams | | d calibration certific | ate (ISO 17025) | | | |
| Size Length x Width x Height | | .80 x .56 x .23 | Inches | 20.3 x 14.2 x 5.8 | mm | 2) Two mounting screws model # 6746 | | | | | |
| Connector Type | | 4-PIN, M4.5 x 0.35 THD | | 4-PIN, M4.5 x 0.35 THD | 1 | 3) Two mounting washers model # 6743 | | | | | |
| Mounting | | 4-40 X 7/16 LG SHCS | | 4-40 X 7/16 LG SHCS | | Notes: | | | | | |
| Material | | Ti-6AI-4V | Ti-6AI-4V Ti-6AI-4V | | | [1] Single ended sensitivity is half of values shown | | | | | |
| | | - | | | | [2] -90% to - | +90% of Full Scale | | | | |
| PERFORMANCE | | | | | | [3] Over the | rated temperature | range | | | |
| Input Range | | ±25 | ±25 g ±245 m/s ² | | | [4] Bias voltage equal to (+ v - (-v)) / 2 | | | | | |
| Frequency Response (±3dB) | | 0-1500 | Hz | 0-1500 | Hz | [5] Mating cable 6895A | | | | | |
| Sensitivity Differential, ±5% [1] | | 20 | mV/g | 2.0 | mV/m/s ² | [6] In the interest of constant product improvement, we reserve the right to change specifications without notice. | | | | | |
| Output Noise, Differential ,Typ | | 50 | µ g rms/√ Hz | 491 | μm/s²/vHz | | | | | | |
| Non-Linearity, Max [2] | | 0.5 | % F.S | 0.5 | % F.S | | | | | | |
| Sensitivity Change with Excitation Voltage (6-22 Volts) | | 0.3 | % | 0.3 | % | | | | | | |
| Cross Axis Sensitivity | | < 3 | % | < 3 | % | | 80 | 25 | | | |
| ENVIRONMENTAL | | | | | | - | [20.3] | | - +V PIN 1 | +SIG PIN 2 | ^{.28} [7.1] > .12 |
| Maximum Mechanical Shock (0.1 ms) | | 2000 gpk ±19620 m/s ² peak 111 (ppm of span)/°F 200 (ppm of span)/ | | | | | | | | | |
| Bias Temperature Shift ,Max [3] | | | | | | | | | | | |
| Sensitivity Temperature Shift | | 277 | ppm/°F | 500 | ppm/°C | | | | | A A A A A A A A A A A A A A A A A A A | |
| Operating Temperature Range | | -40 to +176 | ۴F | -40 to +80 | °C | WASHER DYTRAN MODEL 6743 | | | | A A A | |
| Seal | | Hermetic | | Hermetic | | (2 PROVIDE | | | DYTRAN MODEL 6746 (4-PIN CONNECTOR | 2 PROVIDED) | |
| ELECTRICAL | | · · · · · · · · · · · · · · · · · · · | 1 | - | | .24 | | | M4.5 X 0.35 | | .59 [14.9] |
| Output Common Mode Voltage ± VDC | | [4] | | [4] | | [6.1 | · | ┋└──┟┚┟╼┻──╷ | .12 | | I |
| Output Impedence,Nom | | 1225 | Ω | 1225 | Ω | 1 | | £ | .17 [3] [4.3] | | |
| Operating Voltage | | ±3 to ±11 | VDC | ±3 to ±11 | VDC | | | | [4.3] | | |
| Operating Current, Max | | 13 | mA Dc | 13 | mA Dc | | | | | | |
| Change in Operating Current to Excit | itation Voltage | 0.25 | mA/V | 0.25 | mA/V | | | | | | |
| b | | | | | | | drawing are in inches. Re | | | | |
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