

Model Number DOC NO PERFORMANCE SPECIFICATION 3316C2 PS3316C2 SINGLE AXIS CHARGE MODE ACCELEROMETER REV E, ECN 14095, 03/14/18



- BASE ISOLATED
- HERMETICALLY SEALED
- HIGH TEMPERATURE OPERATION
- LOW BASE STRAIN SENSITIVITY

| =1121121 | |
|----------|----|
| ENGLISH | SI |
| | |

| HISICAL | |
|--------------------|-------------|
| Veight, Max. | |
| Connector [3] | Type |
| Mounting Provision | Tapped Hole |
| Naterial | Housing |
| | Connector |
| lement Style | Material |
| | Type |

| 0.46 | oz | 13 | grai |
|----------------|----|----------------|------|
| 10-32 Coaxial | | 10-32 Coaxial | |
| 10-32 UNF-2B | | 10-32 UNF-2B | |
| Alloy 600 | | Alloy 600 | |
| Alloy X-750 | | Alloy X-750 | |
| Single Crystal | | Single Crystal | |
| Planar Shear | | Planar Shear | |

PERFORMANCE

| Sensitivity [1] |
|---|
| Range F.S for ± 5 Volts Output |
| Frequency Range, ±5% |
| Frequency Range, ±10% |
| Resonant Frequency |
| Capacitance |
| Linearity [2] |
| Phase Response (±5°) |
| Maximum Transverse Sensitivity |
| Base Strain Sensitivity, Max. |
| Insulation Resistance, (Connector pin to case |
| |

Insulation Resistance (Case to Base)

| 1 to 2 | pC/g | |
|-----------------|--------|--|
| [7] | g | |
| [4] to 3000 | Hz | |
| [4] to 5000 | Hz | |
| > 17 | kHz | |
| 120 | pF | |
| ± 1% | % F.S. | |
| [4] to 3000 | Hz | |
| 5 | % | |
| 0.0005 | g/με | |
| at 75°F >1.0 | ΜΩ | |
| at 1000°F >0.25 | ΜΩ | |
| at 75°F >10 | ΜΩ | |
| at 1000°F >1.0 | МΩ | |
| Base Isolated | | |
| Negative | | |
| | | |

| c/g | 0.10 to 0.20 | pC/m/s ² |
|-----|----------------|---------------------|
| 3 | [7] | m/s ² |
| z | [4] to 3000 | Hz |
| z | [4] to 5000 | Hz |
| Ηz | > 17 | kHz |
| F | 120 | pF |
| S. | ± 1% | % F.S. |
| z | [4] to 3000 | Hz |
| 6 | 5 | % |
| με | 0.005 | m/s²/με |
| Ω | at 24°C >1.0 | ΜΩ |
| Ω | at 538°C >0.25 | ΜΩ |
| Ω | at 24°C >10 | ΜΩ |
| Ω | at 538°C >1.0 | ΜΩ |
| | Base Isolated | |
| | Negative | |
| | | • |

| ENVIRONMENTAL |
|-------------------|
| Maximum Vibration |
| Maximum Shock |
| Temperature Range |

Ground Isolation

Output Polarity

| Seal |
|--|
| Radiation Exposure Limit (Integrated Neutron Flux) |
| Radiation Exposure Limit (Integrated Gamma Flux) |

| | _ |
|-------------|-------------------|
| ±6000 | G, peak |
| ±10000 | G, peak |
| -60 to+1000 | °F |
| Hermetic | |
| 1.0E+10 | N/cm ² |
| 1.0E+08 | rad |
| | |

| ±58860 | m/s², peak |
|------------|-------------------|
| ±98100 | m/s2, peak |
| -51 to+538 | °C |
| Hermetic | |
| 1.0E+10 | N/cm ² |
| 1.0E+08 | rad |

This family also includes:

| Model | Sensitivity (pC/g) | Range F.S (G's) | Output Polarity | Temperature (°F) |
|-------|--------------------|-----------------|-----------------|------------------|
| | | | | |
| | | | | |
| | | | | |

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

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Model 6200S mounting stud (10-32 to 10-32), Qty. 1
- 3) Model 6377 Removal wrench, Qty. 1

Notes:

- [1] Measured at 100Hz, 1 Grms per ISA RP 37.2
- [2] Measured using zero-based straight line method, % of F.S. or any lesser range.
- [3] Mates with Dytran cable 6946AXX hardline cable and 6979AXX hardline insulated cable.
- [4] Low frequency response and phase response are a function of the discharge time constant of the charge amplifier used. See graph below for example.
- [5] In the interest of constant product improvement, we reserve the right to change specifications without notice.
- [6] Recommended charge amplifier: Dytran model 4754B Series.
- [7] This parameter depends on the gain settings of charge amplifier used
- [8] U.S. Patent number US 8,375,793 B2 applies to this unit.



