

PERFORMANCE SPECIFICATION
ACCELEROMETER
MODEL 7280A-Z RoHS COMPLIANT

Document Number	Rev	Date	Entered by	Description of Change	Change Accountable Engineer	ECO
77769	NR	4/18/23	NAD	Initial Release of Performance Specification Accelerometer for Model 7280A-Z ROHS Compliant	JKN	53762

1.0 **DESCRIPTION**

The Endevco Model 7280A-Z is a dummy transducer designed for system noise monitoring. The original silicon sensor of the 7280A has been replaced by four 6200Ω silicon thin film resistors arranged in a full bridge configuration. The transducer produces practically no output under various environmental conditions.

2.0 **PERFORMANCE**

- 2.1 ACCELERATION SENSITIVITY 10 mV max. @ 200000g
- 2.2 OVERRANGE ACCELERATION LIMIT 200000g
- 2.3 ZEROSHIFT DUE TO HALF-SINE ACCELERATION .5 mV max.
- 2.4 ZERO MEASURAND OUTPUT ±100 mV max.
- 2.5 TRANSVERSE SENSITIVITY 10 mV max. @ 200000g
- 2.6 THERMAL ZEROSHIFT ±50mV maximum, -30°F to +150°F (-34°C to +66°C) relative to +75°F (+24°C)
- 2.7 ZEROSHIFT DUE TO MOUNTING TORQUE ±1 mV maximum, 0 to 8 lbf-in.

3.0 **ELECTRICAL**

- 3.1 EXCITATION 10.00 Vdc, 12 Vdc max.
- 3.2 RESISTANCE 6200 ± 300Ω
- 3.3 INSULATION RESISTANCE 100 MΩ minimum at 100 Vdc between the sensor (all leads tied together) and cable shield or case

4.0 **PHYSICAL**

- 4.1 CASE MATERIAL 17-4 PH CRES
- 4.2 WEIGHT EXCLUDING CABLE 4.0 grams
- 4.3 IDENTIFICATION Serial number on side of unit, "7280A-Z" marking on lid

- 4.4 MOUNTING (2) 4-40 high strength screws (supplied)
 (2) No. 4 washers (supplied)
 Recommended mounting torque, 8 ±2 lbf-l
 (0.9 N-m)
- 5.0 **ENVIRONMENTAL**
- 5.1 TEMPERATURE
 Operating: -67°F to +150°F (-55°C to +66°C)
 Non-operating: -67°F to +250°F (-55°C to +121°C)
- 5.2 SHOCK LIMITS (in any direction) Half-sine pulse at full scale range. Pulse duration should be the greater of 20 microseconds or five periods of the resonant frequency
- 5.3 HUMIDITY Epoxied sealed
- 5.4 BASE STRAIN SENSITIVITY Typically less than 0.1 mV for 250 microstrain when tested per ISA 37.2, para 6.5
- 6.0 **ACCESSORIES**
- 6.1 SUPPLIED
 EDVEHW265 Washers 2X
 EDVEH137 (2) Screws, 4-40 Allenoy Steel 2X or equivalent
 Socket Head Cap 5/8" long
- 6.2 OPTIONAL
 Model 7970 Triaxial Mounting Block
- 7.0 **CALIBRATION**
 Each unit is tested for output at 10000 g ±20% at room temperature in the sensitive axis.
 The output of the unit due to shock must not exceed 0.5 mV with 10.0 Vdc excitation
- 8.0 **MODEL NUMBER DIFINITION**

7280A - Z - XXX

