

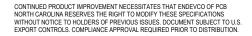
# PERFORMANCE SPECIFICATION ACCELEROMETER MODEL 7280A-Z RoHS COMPLIANT

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 The original silicon sensor of the 7280A has been replaced by four  $6200\Omega$  silicon thin film resistors arranged in a full bridge configuration.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	$6200 \pm 300\Omega$
3.3	INSULATION RESISTANCE	$100\;\text{M}\Omega$ minimum at $100\;\text{Vdc}$ 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  $\pm 20\%$  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

