

PERFORMANCE SPECIFICATION  
ACCELEROMETER  
MODEL 7280AM7-Z RoHS COMPLIANT

Document Number	Rev	Date	Entered by	Description of Change	Change Accountable Engineer	ECO
73355	NR	04/21/20	LMK	Initial Release	JN	50691

## 1.0 DESCRIPTION

The Endevco Model 7280AM7-Z is a dummy transducer designed for system noise monitoring. The original silicon sensor of the 7280AM7 has been replaced by four 6200Ω silicon thin film resistors arranged in a full bridge configuration.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, "7280AM7-Z" marking on lid   |
| 4.4 | MOUNTING               | (2) 4-40 high strength screws (supplied)<br>(2) No. 4 washers (supplied)<br>Recommended mounting torque, 8 ±2 lbf-l (0.9 N-m) |

#### 5.0 **ENVIRONMENTAL**

- |     |   |  |
|-----|---|--|
| 5.1 | TEMPERATURE<br>Operating:<br>Non-operating: | -67°F to +150°F (-55°C to +66°C)<br>-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                                    | Epoxyed 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<br>EHW265<br>EH853 | Washers 2X<br>(2) Screws, 4-40 Allenoy Steel 2X or equivalent<br>Socket Head Cap 5/8" long |
| 6.2 | OPTIONAL<br>Model 7980      | 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

