

PERFORMANCE SPECIFICATION  
ACCELEROMETER  
(MODEL 7284A-Z-XXX) RoHS COMPLIANT

Document Number	Rev	Date	Entered by	Description of Change	Change Accountable Engineer	ECO
74546	NR	3/29/21	NAD	Initial Release	JKN	51577

1.0 **DESCRIPTION**

The ENDEVCO Model 7284A-Z is a dummy transducer designed for system noise monitoring. The original silicon sensors of the 7284A have each been replaced by four 6200Ω silicon thin film resistors arranged in a full bridge configuration.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            | 5.00 Vdc, 12 Vdc max.  |
| 3.2 | RESISTANCE            |  |
|     | Input                 | 2066 ± 100Ω  |
|     | Output (each axis)    | 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	<b><u>PHYSICAL</u></b>	
4.1	CASE MATERIAL	17-4 PH CRES
4.2	WEIGHT EXCLUDING CABLE	1.5 grams
4.3	IDENTIFICATION	Serial Number on side of unit; "7284A-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	<b><u>ENVIRONMENTAL</u></b>	
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	Epoxy 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	<b><u>ACCESSORIES</u></b>	
6.1	SUPPLIED	
	EHW265	#4 flat washers, 2x
	EH815	#4-40 x 3/8" screw, alloy steel, 2x
6.2	OPTIONAL	
		2974M8 Test Fixture, Triaxial
7.0	<b><u>CALIBRATION</u></b>	
	Each unit is tested for output at 10000 g ±20% at room temperature in each of the 3 sensitive axis. The output of the unit due to shock must not exceed 0.5 mV with 5.0 Vdc excitation.	

## 8.0 MODEL NUMBER DEFINITION

