



# Bell Technologies

a *SYPRIS* company

## **REPORT OF TEST ON**

### **ONE COAXIAL CABLE**

### **VIBRATION TEST**

for

### **MEGA PHASE**

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**REPORT OF TEST ON**

**ONE COAXIAL CABLE**

**VIBRATION TEST**

for

**MEGA PHASE**

**Bell Technologies Testing Division**  
1133 Route 23 South, Wayne, NJ 07470

Date: October 6, 2000

Prepared by: **Matthew L. Wood**  
Director of Operations

Checked by: **Donald R. Zoon**  
Test Engineer *ga*

Signed: *Matthew L. Wood*

Signed: *John J. Zoon*

Date: 10/6/00

Date: 10/6/00

ADMINISTRATIVE DATA

- 1.0 **PURPOSE:** To subject the submitted unit to a vibration test.
  
- 2.0 **MANUFACTURER:** Mega Phase  
201-D North 1<sup>st</sup> Street  
Stroudsburgh, PA 18360
  
- 3.0 **TEST ITEM IDENTIFICATION:** Part No. P520-S321-256  
Serial No. 0001TS
  
- 4.0 **SPECIFICATION:** Purchase Order No. 009004  
Dwg. ATP 2002, Sheet II
  
- 5.0 **QUANTITY OF ITEMS TESTED:** 1
  
- 6.0 **SECURITY CLASSIFICATION:** Unclassified
  
- 7.0 **DATE TEST COMPLETED:** September 20, 2000
  
- 8.0 **TEST CONDUCTED BY:** Bell Technologies Testing Division  
1133 Route 23 South  
Wayne, NJ 07470
  
- 9.0 **DISPOSITION OF TEST ITEMS:** Returned to Mega Phase.
  
- 10.0 **ABSTRACT:** The unit completed the vibration test with no evidence of visible damage.

## LIST OF APPARATUS

ITEM	MANUFACTURER	MODEL NO.	<b>Calibration</b>	
			DATE	DUE DATE
Vibration Control System	Spectral Dynamics	2552B	4/26/00	10/26/00
Accelerometer	Endevco	7702A-50	1/24/00	1/24/01
Charge Amplifier	Unholtz-Dickie	D22	8/1/00	2/1/01
Vibration System	Unholtz-Dickie	T508S	External	Equipment

## VIBRATION TEST

### TEST PROCEDURE

The vibration test was performed in accordance with Mega Phase. Purchase Order No. 009004.

The unit was mounted to a vibration machine, see Figure 1, and was then subjected to the following vibration levels for 3 minutes in each of the three mutually perpendicular axes.

<u>Frequency (Hz)</u>	<u>Level or Slope</u>
20-45	+6 dB/Oct.
45-61	3.0 G <sup>2</sup> /Hz
61-150	-6 dB/Oct.
150-800	0.5 G <sup>2</sup> /Hz
800-2000	-6 dB/Oct.

Plots of the vibration profile are shown in figures 2-4.

The unit was not energized during the vibration test.

### TEST RESULTS

The unit completed the vibration test with no evidence of visible damage.

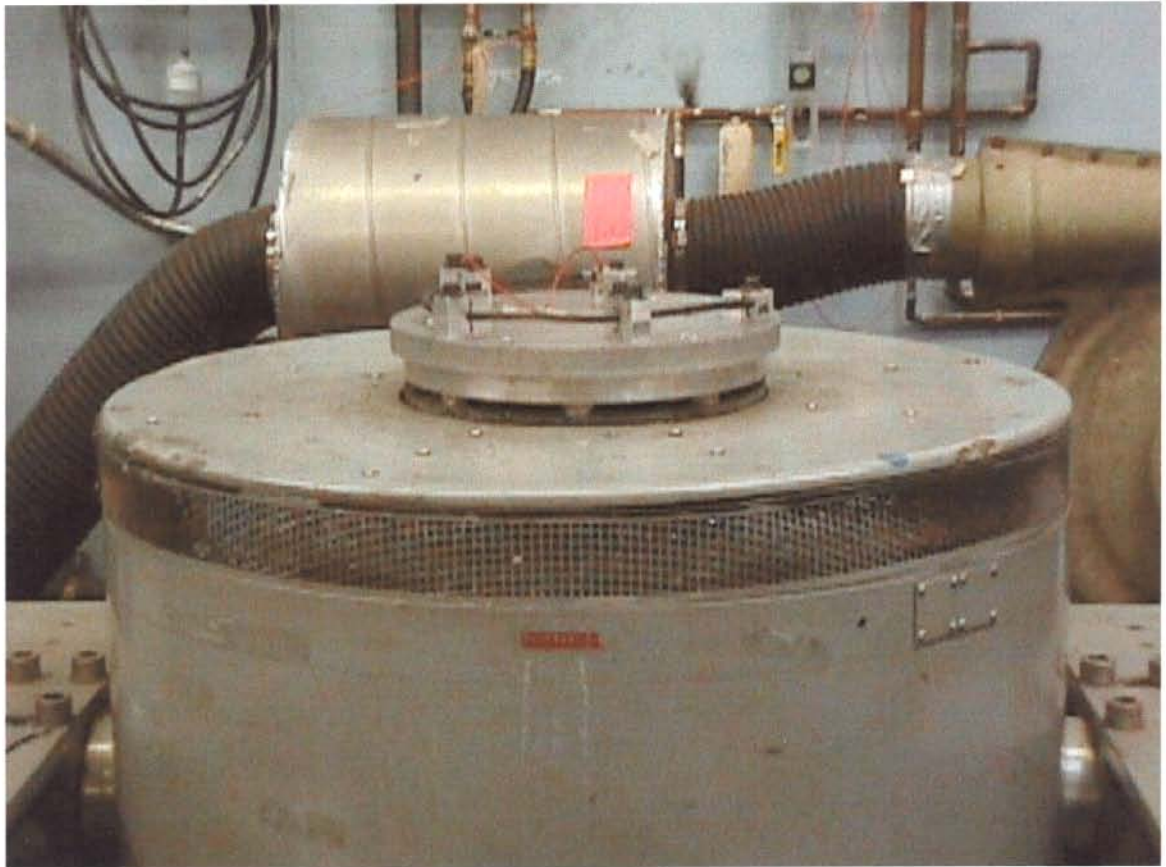


Figure 1  
Vibration Test Setup

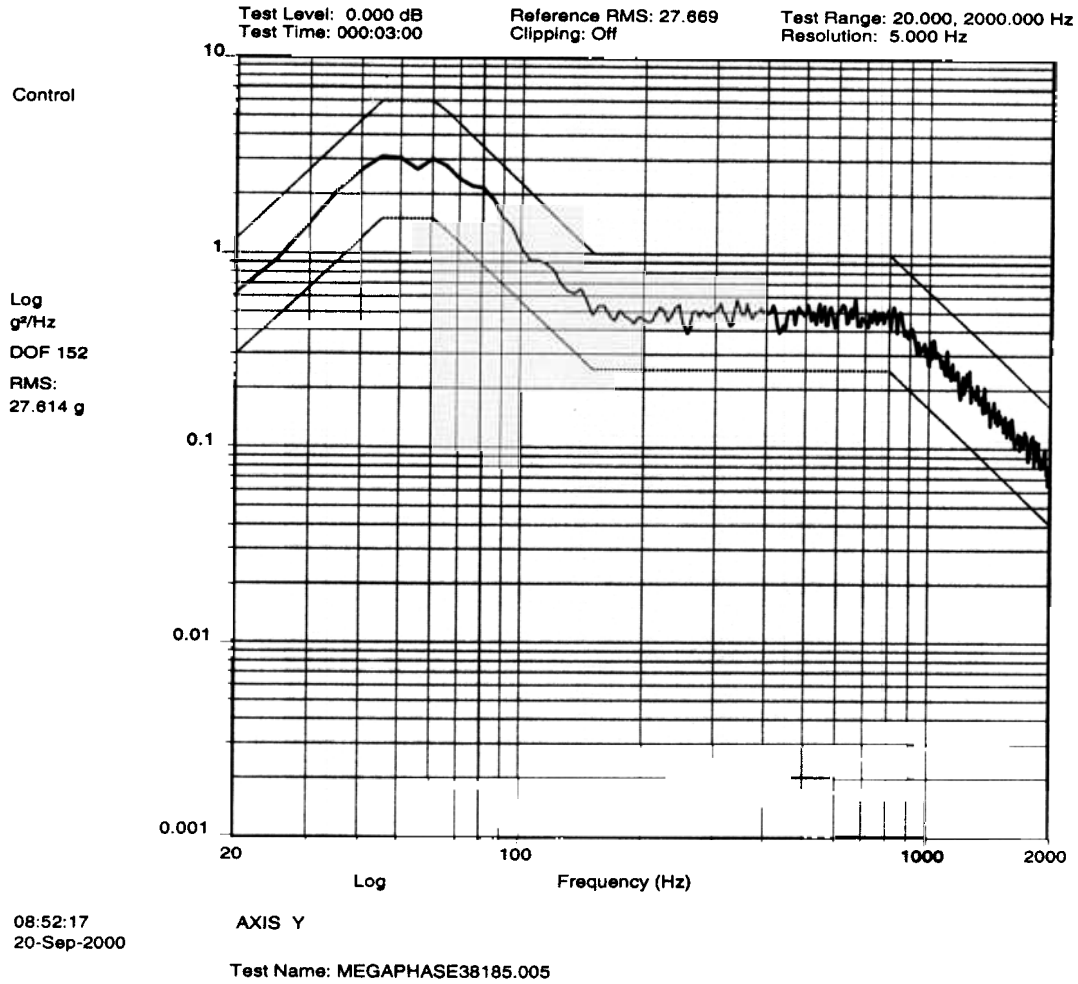


Figure 2  
Vibration Plot  
Y-Axis

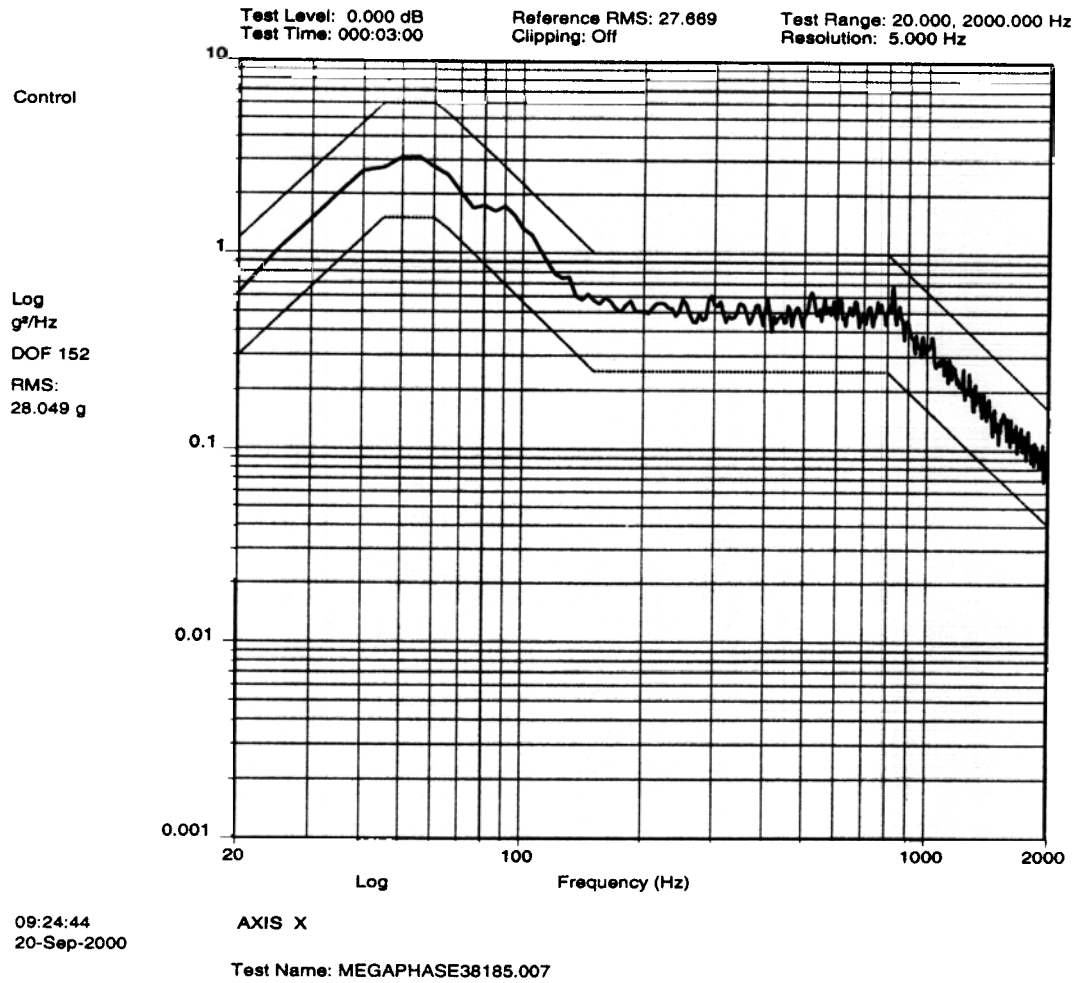


Figure 3  
Vibration Plot  
X-Axis

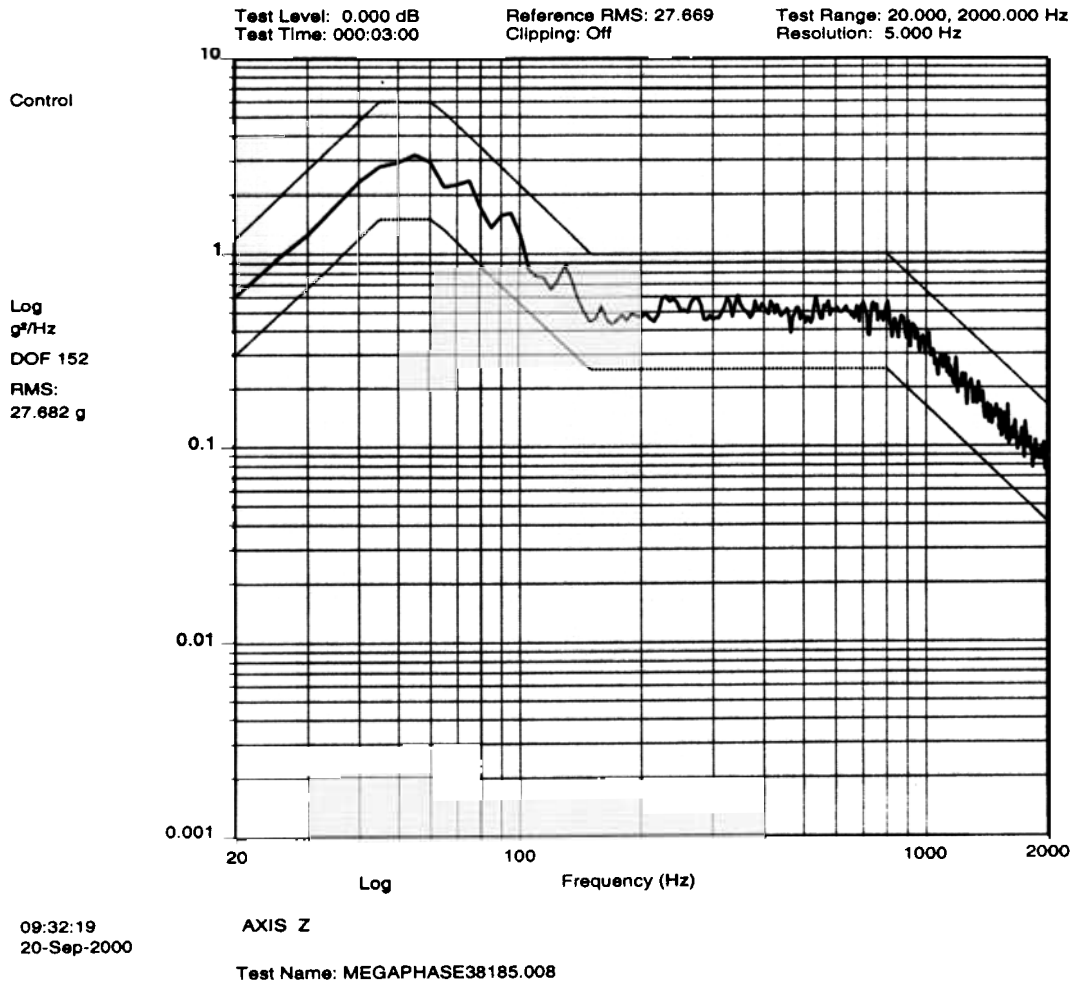


Figure 4  
Vibration Plot  
Z-Axis



As a network of five laboratories, Bell Technologies provides a broad range of testing and value-added services to a worldwide base of customers. Strategically located throughout the U.S., each Center of Excellence offers comprehensive solutions for virtually any test requirement.

Massachusetts  
53 Second Ave.  
Burlington, MA 01803  
(781) 272-9050

The Burlington Center of Excellence offers a range of environments from the Arctic to the tropics, deep space to below sea level, a full array of dynamics, transportation, aerospace and electronics testing. The Burlington laboratory provides a broad spectrum of testing services to the electronics, aerospace/defense, automotive, packaging, medical products and communications equipment industries, additionally offering comprehensive planning, engineering management support, DPA and Failure Analysis. Burlington's credentials include certifications from A2LA and DESC as well as numerous client approvals.

California  
440 N. Bernardo Ave.  
Mountain View, CA 94043  
(650) 969-5500

Located in the heart of Silicon Valley, the Mountain View Center of Excellence was established to service the growing electronics and aerospace industries. As a leader in component and environmental testing, Mountain View has played a major role in support of Silicon Valley component and equipment manufacturers. Additionally, the laboratory participates in national and international space programs and is noted for high-quality testing services at the component, assembly, and systems level.

Florida  
6120 Hanging Moss Road  
Orlando, FL 32807  
(407) 671-3600

The Orlando Center of Excellence provides full space and defense upscreening and DESC-suitable environmental testing. In addition, the Orlando laboratory can provide all the services needed to perform a total screening program. This service allows the center to devote an entire team to the specific needs of the program, which in turn greatly reduces the total cost of procurement. Other specialized services include bench testing such as high current, extremely low current, high voltage, high-speed burn-in, DPA, RF and tight tolerance requirements.

Arizona  
2320 West Peoria Avenue  
Building D-133  
Phoenix, AZ 85029  
(602) 997-8378

Our Phoenix Center of Excellence is an industry leader in electrical testing and environmental stressing of integrated circuits. Besides expertise in testing and qualification of dual-in-line, surface mount and sub-SO package styles, the Phoenix test engineers are available for help in designing upscreening specifications to meet the latest reliability requirements. Our state-of-the-art memory test system allows us to perform electrical characterization and high volume production testing on virtually any part type.

New Jersey  
1133 Route 23 South  
Wayne, NJ 07470  
(973) 628-1363

With over 35 years of commercial product testing experience, the Wayne, New Jersey Center of Excellence specializes in package testing through environmental, atmospheric and dynamic simulation. Offering such capabilities as temperature storage testing, shelf-life, compatibility, child-resistant package testing, transportation vibration and drop shock tests, the center services everything from guitars and motorcycles to healthcare products and cookies.

