

LORD® Micro-Mounts™ for Oil & Gas Applications

Creating Solutions to Your Most Demanding Challenges

Are your electronic circuit boards suffering from excessive shock and vibration?

A COLLABORATIVE PARTNERSHIP

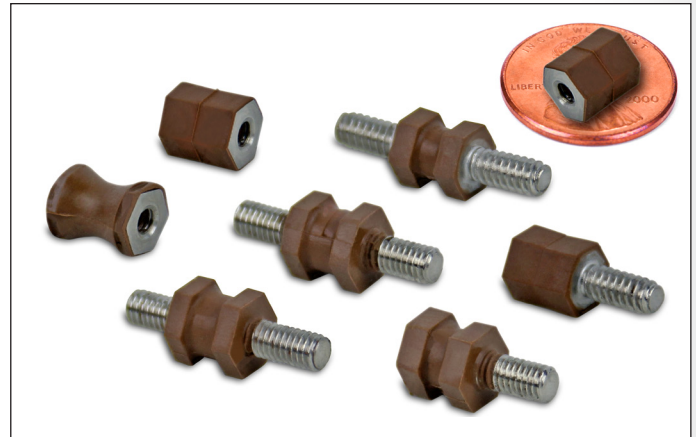
Look to LORD Corporation for the solution to your demanding challenges. The need for a solution capable of isolating electronic components and other light-weight electronic equipment from shock and vibration led us to apply our aerospace isolator knowledge to address the needs of downhole and surface systems. With LORD isolators, you no longer compromise between reliability, performance and durability – LORD offers you the solution to isolation.

The unique Micro-Mount™ Series are high-performance isolators small enough and soft enough to protect individual electronic components allowing isolation at the circuit board level. Micro-Mounts can be used as a stand-alone solution or to augment performance of a LORD full-system isolation solution. These small, flexible mounts are used successfully on GPS oscillators in satellites, military aircraft, and downhole equipment.

Made of BTR® (Broad Temperature Range) silicone bonded to stainless-steel, these mounts are ideal for applications requiring consistent performance at extreme temperatures. And, the combination of this unique, high-end silicone with stainless-steel components assures easy installation in a wide range of applications.

Micro-Mounts are perfect for severe applications requiring extended service life, such as:

- Well intervention tools: well tractors and production logging tools
- Wireline tools: open-hole and cased hole tools
- LWD and MWD electronics: probe and collar-based tools
- Subsea applications: control modules and electronics packages
- Surface equipment electronics: electronic control packages and acquisition systems
- Any printed circuit board (PCB)



LORD Micro-Mounts



Nut/Nut		Post/Nut		Post/Post	
LORD Part Number	Thread Count	LORD Part Number	Thread Count	LORD Part Number	Thread Count
J-28509-1	#2-56	J-28420-1	M3 x 0.5	J-28418-1/-3	M3 x 0.5
		J-28421-1	#4-40	J-28419-1	#4-40
		J-28472-1	#2-56	J-28473-1	#2-56

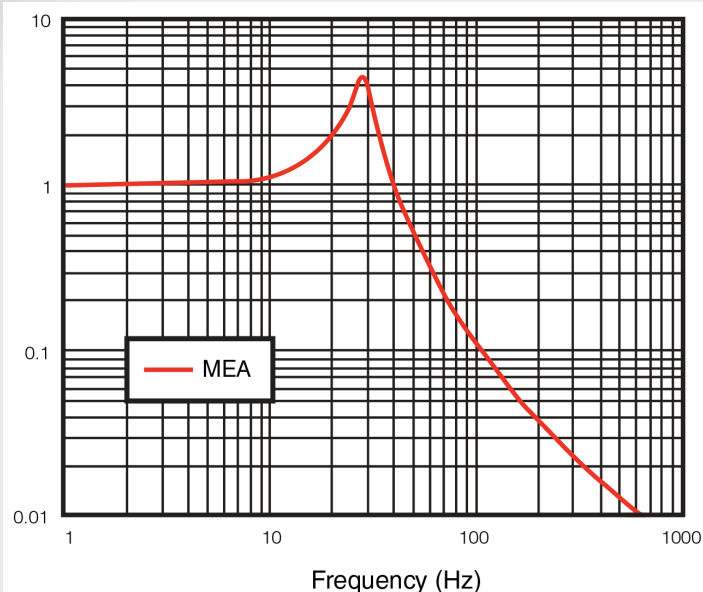
Micro-Mount Interface Options

RATED SHOCK LOADS*				
STATIC LOAD PER MOUNT				
lbs.	0.20	0.10	0.05	0.01
max g's	125	185	276	768

* with 0.5 millisecond pulse width

LORD Micro-Mount isolators can be designed to meet your unique downhole conditions:

- Individual mounts support 0.1 lb
- Standard hardware
- Easy installation; available in Nut/Nut, Post/Nut and Post/Post configurations in many common threads (#2-56, #4-40, M3)
- Temperature rated to 350°F continuous operation (400°F peak)



Micro-Mount Vibration Isolation Curve

Shock Test Results*						
Accelerometer Location	Axial		Lateral		Orthogonal	
	Standard A_{Max} [g]	Micro-Mount A_{Max} [g]	Standard A_{Max} [g]	Micro-Mount A_{Max} [g]	Standard A_{Max} [g]	Micro-Mount A_{Max} [g]
Transformer	500**	2	162	3.2	315	5.7
Bracketed Transformer	600**	41	151	2.7	167	5.9
Primary Relay	204	16	183	11	112	54
Capacitor	N/A	98	500**	28	305	94

* Results indicated are an example of the effect of Micro-Mounts on the shock response of a specific electronics board assembly. Results provided are for reference only.

** Data was clipped (accelerations greater than accelerometer rating).

Micro-Mounts reduce board-level acceleration levels by 2x to 200x compared to hard mounting components.

ABOUT LORD CORPORATION

Founded in 1924, LORD Corporation is a diversified technology and manufacturing company commercializing highly reliable adhesives, coatings, vibration control and motion management devices and systems, and sensing technologies. Our dedicated teams collaborate with customers to provide innovative solutions, reduce risk and increase the value of their products ... Ask Us How.

Employees: More than 3,000 worldwide

Operations: LORD operates 19 manufacturing facilities and 10 R&D centers worldwide. Dedicated teams provide customers with easy access to products and technical expertise — whenever and wherever they are needed.

CORE SCIENCES AND TECHNOLOGIES

Continuing the company's tradition of ingenuity and inventive spirit, we continue to develop technologies to meet the needs and challenges of an ever-evolving global marketplace.

- Surface Science
- Polymer Science
- Material Science
- Mechanical Design
- Dynamic Systems
- Control Systems
- Wireless Sensing
- Energy Harvesting
- Inertial/Orientation Technologies
- Displacement Sensing

MORE INFORMATION

To learn more about LORD Oil & Gas products, visit LORD.com/OilandGas. Contact Customer Support at +1 855 796 1595 or OilandGas@lord.com.