Electronic Grade Foam Protects Components

E-A-R Specialty Composites has developed a non-silicone formulation if its highly damped, slow-recovery CONFOR&reg foam, specifically to address the shock protection needs of today's miniaturized computers, hand-held electronics, and personal digital assistants. Used as shock pads, spacers, or snubbers, energy-absorbent CONFOR CF-45E foam protects delicate components from shock and vibration, with no silicone off-gassing. The semi-open celled foam provides acoustical insulation as well.
Even as thin cushions &#151 less than 4 mm thick &#151 CONFOR CF-45E foam absorbs and dissipates up to 97 percent of shock energy without recoiling and amplifying the effect. In electronic devices, it can prevent circuit boards from colliding, speakers from crashing into the shell and LCD screens from cracking. Used as speaker and microphone seals, it reduces audio distortion and background noise.
Non-silicone CONFOR CF-45E foam has virtually the same physical and dynamic performance properties as the CONFOR CF-45 formulation. The 6 pcf material resists compression set, has a UL rating of HF-1, and has a high damping loss factor of 1.1 to 1.2 at 10 Hz and 0.3 percent amplitude in torsional mode. Like all CONFOR formulations, CF-45E foam is engineered to compress and conform under sustained pressure and to slowly rebound when the weight is released. When the foam receives a direct impact, however, it behaves like a semi-rigid foam, resisting collapse and absorbing the impact internally.

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