

Piezo Ceramic & Carbon Series Products

A Furutech First!

Furutech's Pure Transmission Piezo Ceramic and Carbon series products feature a breakthrough construction technique. A special material in the products combines two "active" materials: Nano-sized ceramic particles and powdered carbon. (Only nano-sized ceramic particles effectively couples with carbon powder.) Nylon and fiberglass are incorporated as well forming an extremely effective, well damped, mechanically and electrically nonresonant connector body. That's correct, they're electrically damped as well.

Piezoelectric effects are the key. Furutech's breakthrough in design and materials is based on employing nano-sized polycrystalline ferroelectric ceramic particles exhibiting electro-generative properties; mechanical pressure creates an electrical charge forming a bridge between electrical and mechanical oscillation.

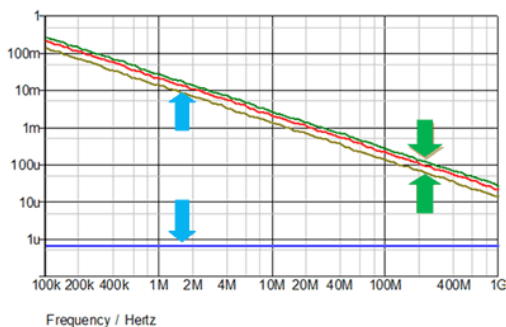
Carbon powder exhibits thermal-conductive characteristics that interact with the charged ferro-ceramic particles converting their energy into heat that's conducted away and released from the surface of the connector body!

These carefully chosen and tested "active" materials mechanically and electrically damp connectors, receptacles and other products as they "interconvert" thermal, mechanical, and electrical energy for the finest Furutech Pure Transmission signal imaginable.

Innovations Award-Winning FI50 Piezo Connector Series

The FI-50 series connectors are crafted from nonmagnetic stainless steel covered with six-layers of piezo-conductive carbon fiber with all metal parts tied to ground with the Floating Field Damper so any noise generated within or around the connector is shunted to ground.

The graph below illustrates the Floating Field Damper curbing noise generated between 100kHz and 1GHz:



1. Green: Attenuation of radiated voltage/noise from a power supply line with Floating Field Damper

2. Blue: Attenuation of radiated voltage/noise surrounding the housing of the connector with Floating Field Damper

