

A Detailed Briefing About the Construction of the EESeal® EMI Filter Insert



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www.eeseal.com



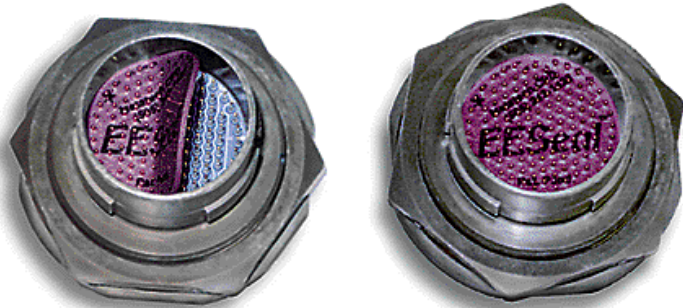
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The EESeal® device and method are covered by US Pat 5,686,697 and various international patents pending

What is Quell's innovative *EESeal*[®] *FilterSeal*?

- **EMI Filter Insert that installs in any connector in seconds**
 - no soldering, no tools required



- **EESeal's unique *elastomeric body & adaptive interconnect system** suspends, isolates & protects discrete electrical components**
 - entire assembly can radically change shape and size in response to external forces
 - individual components and interconnections move as body changes shape while maintaining electrical and mechanical integrity
 - body acts as conformal coat & electrical isolation for suspended components
 - natural compressive forces exploited to create re-usable electrical contacts that can withstand extreme abuse (severe misalignments, vibration, wrong pin sizes)
 - environmental seal created for the host location

Contact Quell & Get A Free Sample!



How to contact Quell:

Phone: (505) 243-1423

Fax: (505) 243-9772

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Get a **free** EESeal FilterSeal
just for the asking!

DSub-type (9, 15, 25 or 37 pin
with various filters available)

**MS-circular available on a
limited basis** (if we have what
you want in stock, we'll sample
it to you free of charge)

Request a **FREE** custom
prototype for most applications

* **US Pat 5,686,697**

Some major advantages over existing EMI filters

- **No circuit-board, substrate or brittle materials of any kind, so EESeal®:**
 - > is mostly silicone elastomer, like the interfacial seal in most MS Circular connectors (it won't create air pockets or defeat the existing environmental seal)
 - > uses 3D construction (2D PC board construction risks violation of applicable mil-standards for spacing, conformal coat, pad-size, etc.)
 - > components and wiring are fully imbedded in protective material (caps can't "pop off", won't be damaged/cracked during installation or use)
 - > all surfaces of external and internal wiring fully plated (50-70µin Au over Ni flash)
 - > withstands severe temperature ranges and exposure to many deteriorating influences such as ozone, chemicals, aging, UV
- **No "brittle" spring metal contacts (e.g., BeCu), so EESeal® contacts:**
 - > can accommodate severe misalignment and mismatch without degradation
 - > will not be "sprung" by overstress during installation or use

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Some Major Benefits of EESeal[®] FilterSeals

- **EESeal[®] FilterSeals** can quickly and easily **RETROFIT** any connector with **EMI & transient protection**
 - » **easy to install & remove** in field by non-expert personnel with no special tools
 - » **virtually “invisible”** once installed -- they look like a normal part of a connector
 - » **maintains environmental seal** of host connector
 - » **adapts to real-world variations & stress** commonly associated with connectors and connector pins (bent pins, severe shock & vibration, rough handling, etc.)
 - » rugged design **proven via Mil-Std & FAA/DO-160C** environmental stress testing
 - » extremely low weight
 - » filter can be designed/modified very late in design process
 - » reduces risk of passing EMC tests because design is flexible, easy to update
 - » no “bad side-effects” like existing technology (installation damage & difficulty, etc)
- **EESeal[®] FilterSeal** allow you to **prove** its effectiveness
 - » **1. test your system without EESeal, show you’ve got a problem**
 - » **2. take a couple minutes to install EESeal in the failing system**
 - » **3. retest and prove for yourself it works!**

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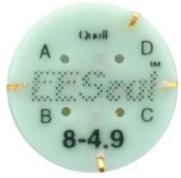
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EESeals are Available for a Wide Range of Connectors

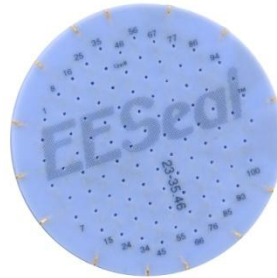
A Few Common Examples:



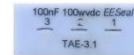
MIL-STD-5015



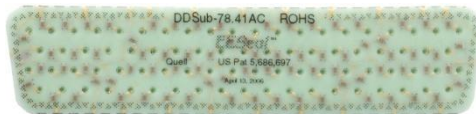
MIL-STD-26482



MIL-C-38999



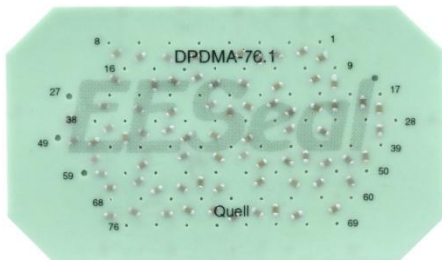
customs



High Density DSubminiature



DSubminiature



Avionics Rack Connectors



ARINCs

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