

ConvergeRF Cable Assemblies



Features & Benefits

- Incorporate a high density bundle of cable assemblies while maintaining low loss
- SV's proprietary splice reduces mating interfaces by removing RF connectors
- Reduces components by using one cable assembly
- Customized lengths to allow for any situation
- Maximize insertion loss budget in complex applications

Applications

- VITA 67.3 and HD VITA 67.3 Plug-In Modules where cables need a tight routing inside the chassis
- Crowded coaxial D38999 contacts and cable assemblies
- Mini-D RF Connection System
- Any situation where routing is tight and low insertion loss is critical

Why ConvergeRF?

RF signal paths are going higher in frequency and tighter in density. This forces designers to choose between cables that are small and flexible or large and low loss. One compromise is to utilize two discreet cable assemblies, which presents its own challenges as it introduces more interfaces, more handling, and degradation of performance into the overall design.

Figure 1 shows how ConvergeRF transitions from $\varnothing.086''$ to $\varnothing.047''$ through a direct solder connection. Figure 2 demonstrates ConvergeRF's ability to provide flexibility and routing capabilities in a Mini-D RF connection system.

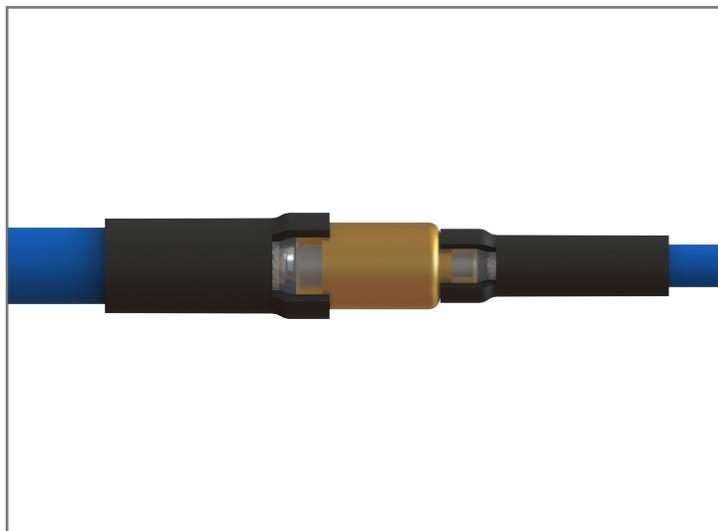


Figure 1: Render of soldered connection between a $\varnothing.086''$ cable (left) and a $\varnothing.047''$ cable (right)

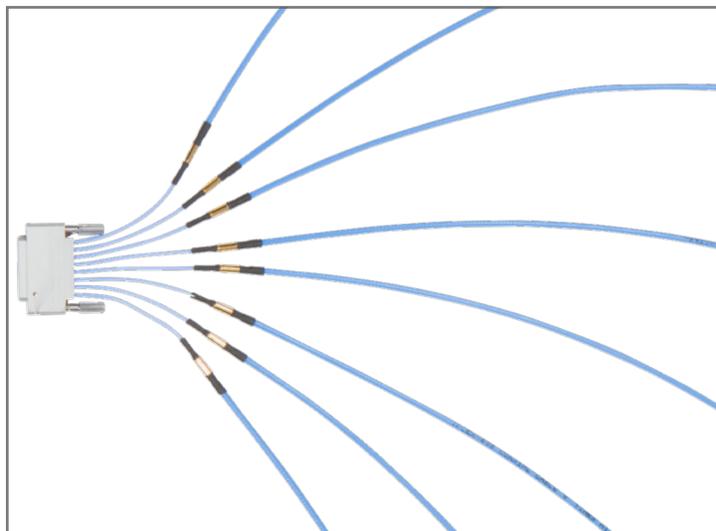


Figure 3: Example of how ConvergeRF can be used in a Mini-D RF connection system

Figure 3 demonstrates how a ConvergeRF cable assembly can achieve low loss while still maintaining flexibility when needed. Depending on your specific application, each ConvergeRF cable assembly can be configured with a custom length of $\varnothing.047''$ within the overall cable assembly length. Figure 4 graphs the VSWR of a ConvergeRF cable assembly solution.

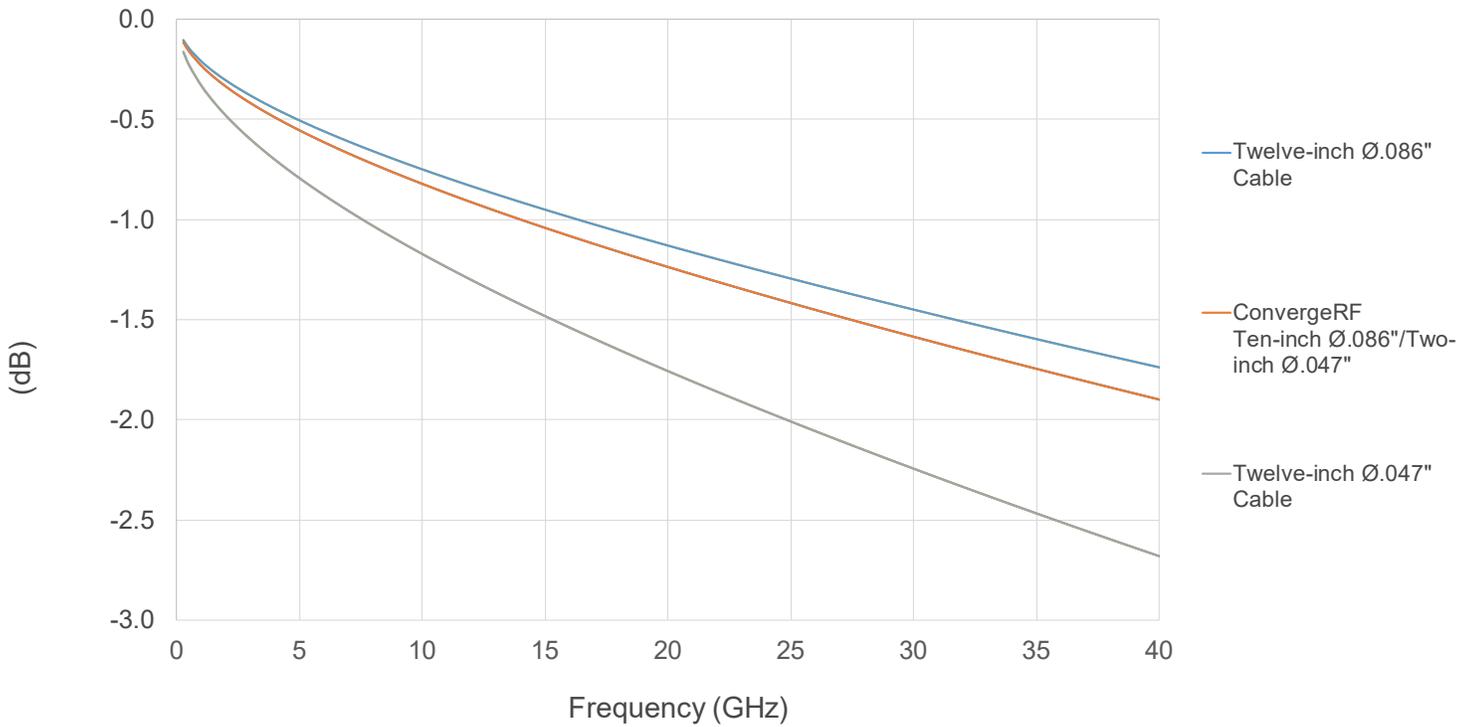


Figure 3: Insertion loss difference between ConvergeRF and standard cables

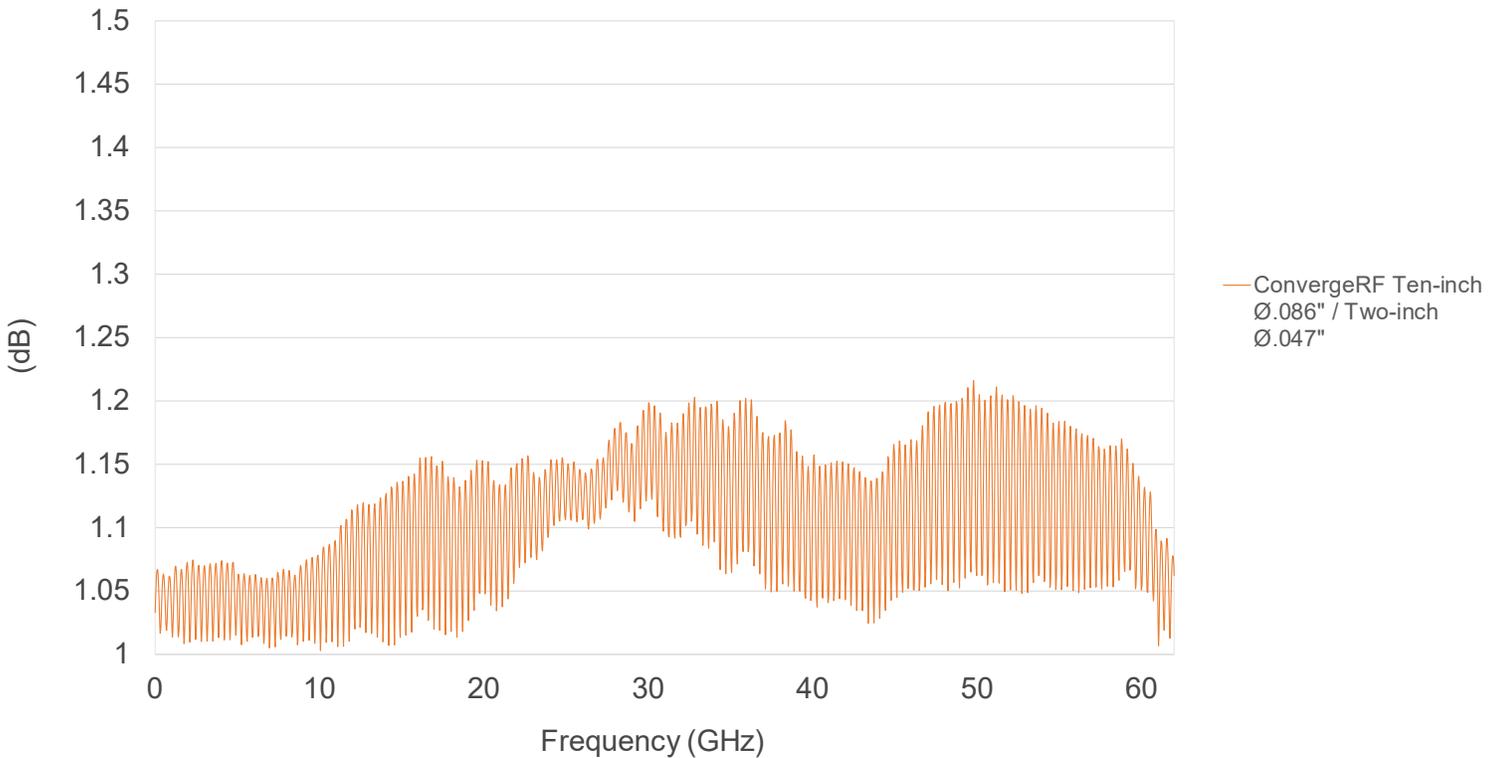


Figure 4: VSWR in a ConvergeRF cable assembly

Contact sales at marketing@svmicro.com to get started on your custom configurations.