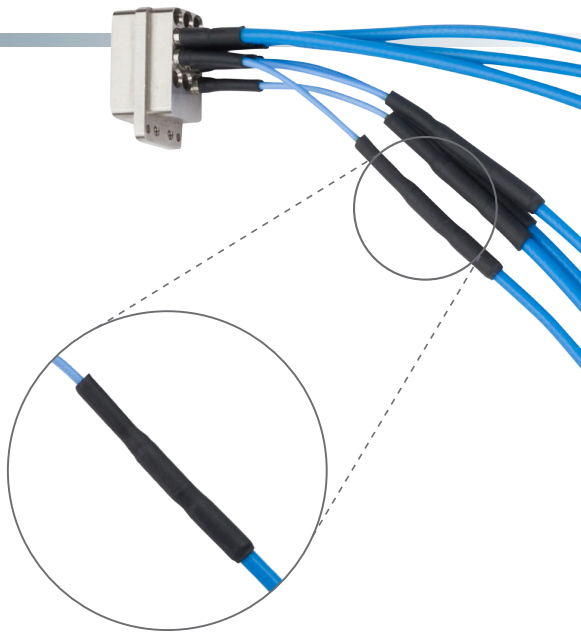
# ConvergeRF Cable Assemblies



## Features & Benefits

- Reduces impact to insertion loss budget
- SV's proprietary splice reduces cost and in-line interfaces
- Customized lengths to allow for any situation

## Applications

- VITA / SOSA products
- Size 16 & 20 coaxial D38999 contacts
- Mini-D RF Connection System
- High density applications where routing is tight

## 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 Ø.085" to Ø.047" cables through a direct solder connection. Figure 2 demonstrates ConvergeRF's ability to provide more density in multiport applications like a Mini-D RF connection system.

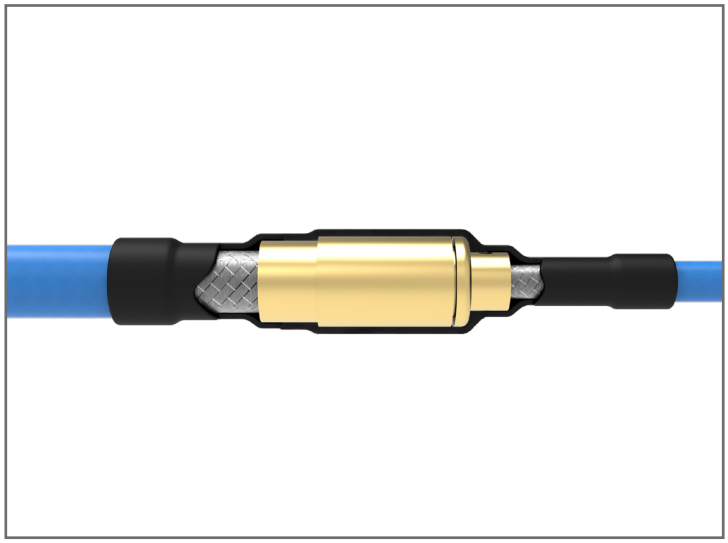


**Figure 1:** Render of soldered connection between a Ø.085" cable (left) and a Ø.047" cable (right)

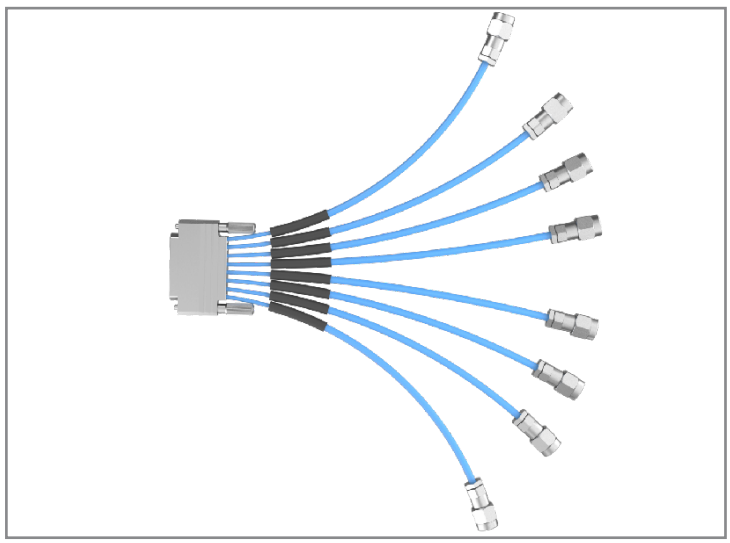


**Figure 2:** Mini-D RF + ConvergeRF example. Mini-D uses Ø.047" cable, but with ConvergeRF can transition to Ø.085" cable.

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Figure 3 demonstrates how a ConvergeRF cable assembly can achieve low loss while still maintaining flexibility where needed. Each ConvergeRF cable assembly can be custom configured with two cable lengths of different diameters to meet your specific applications. Figure 4 clearly displays the improvement in VSWR that comes as a result of incorporating ConvergeRF, instead of more mating interfaces.

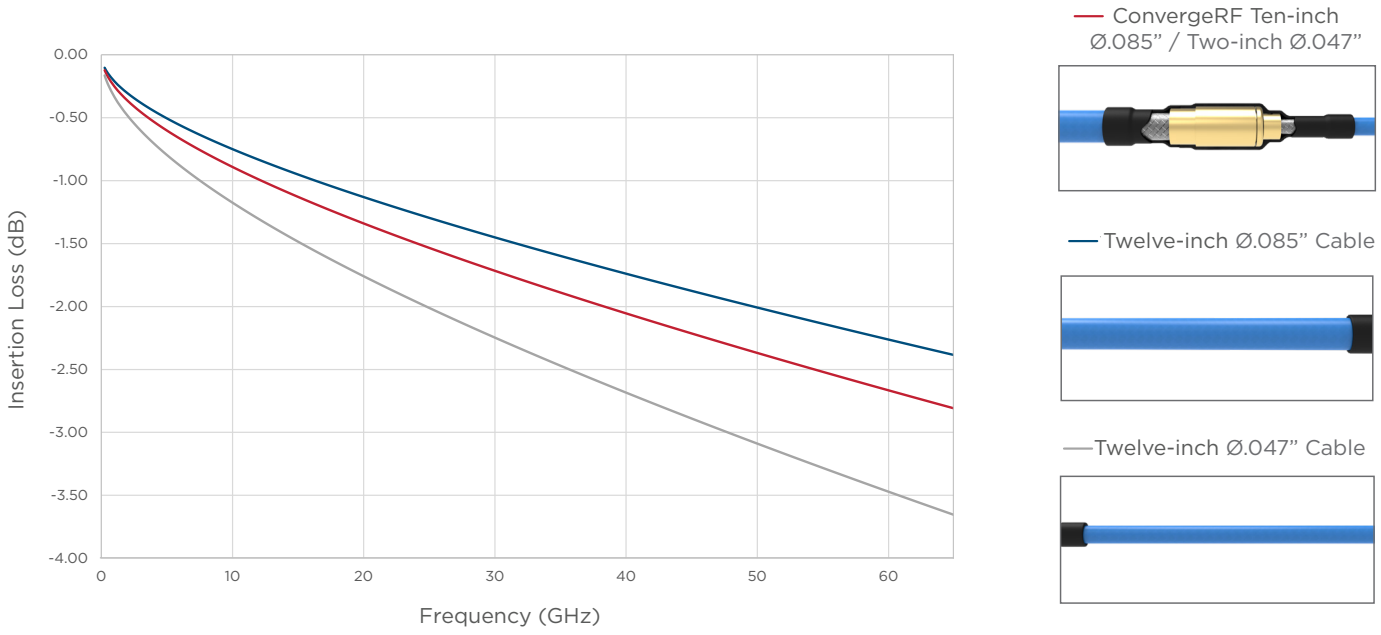


**Figure 3:** Insertion loss difference between ConvergeRF and standard cables

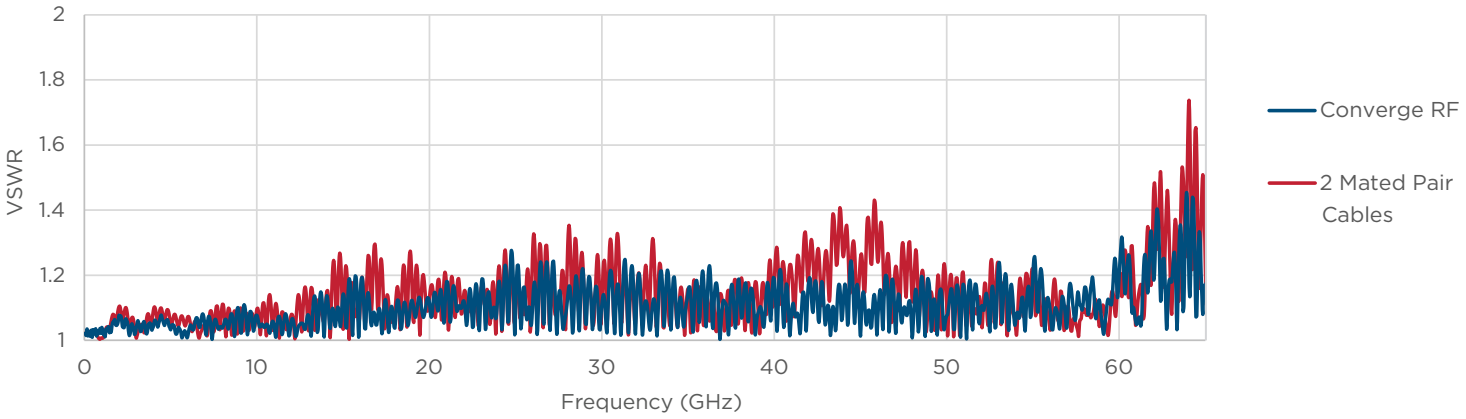


**Figure 4:** VSWR of a ConvergeRF Assembly vs Mated Pair

| ConvergeRF | Part Number |
|---|---|
| .047"→ .085" | 1180-4015 |
| .047"→ .087LL" | 1180-4019 |
| .047"→ .141" | 1180-4017 |
| .047"→ .141LL" | 1180-4021 |

Contact applications@svmicro.com to get started on your custom configurations.


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Rev. 1 (6/25)