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DIELECTRIC LABORATORIES

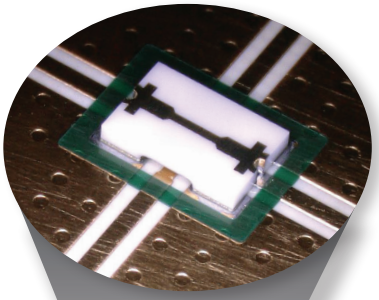
High Frequency RF Crossover

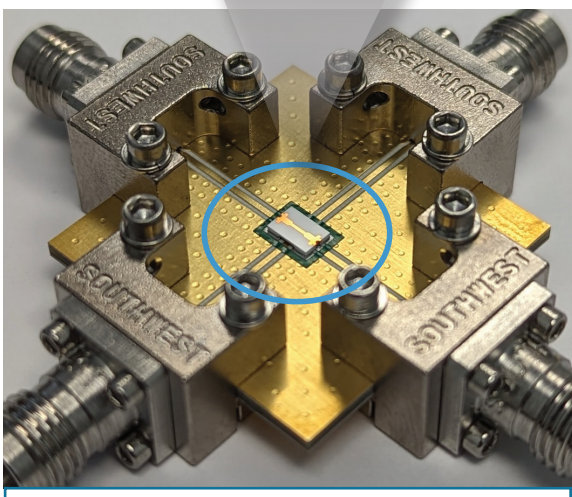
From DC - 40GHz | Knowles Part Number DDL10519

The use of complex multilayer printed circuit boards (PCBs) has become standard, even for the simplest of RF boards, in order to cross over an RF or digital trace. A less expensive, less complex alternative is the component style crossover device which can even eliminate the need for PCBs in some cases.

Current crossover devices available today in the market only operate up to ~6GHz. Not anymore! Knowles' new, patented surface mount RF crossover component can operate **from DC to 40GHz!**

Our RF Crossover utilizes a new grooved ceramic channel which enables the product to crossover a top layer DC or RF trace, simplifying board routings and construction.





Knowles Crossover Part Number:
DDL10519

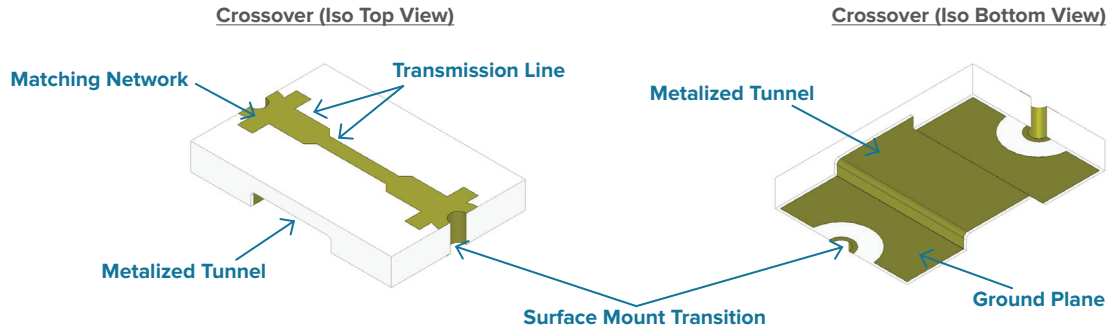
FEATURES & BENEFITS

- Wideband performance covering DC-40GHz
- Ease of implementation (compared to multilayer boards)
- Over 40dB isolation from DC-10GHZ and over 30dB isolation from 10-40GHz
- Over 20dB return loss from DC-10GHz and over 12dB return loss from 10-40GHz
- Small size L 0.15" x W 0.10" x H 0.02"

APPLICATIONS

- Aerospace
- Defense
- Telecom
- Radar

DEVICE CONSTRUCTION



Size Dimenstions: L 0.15" x W 0.10" x H 0.02"

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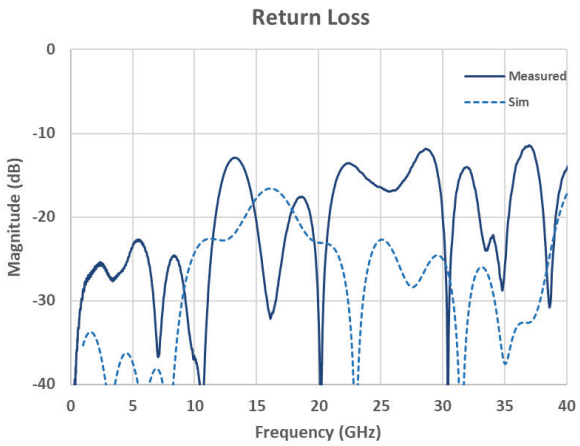
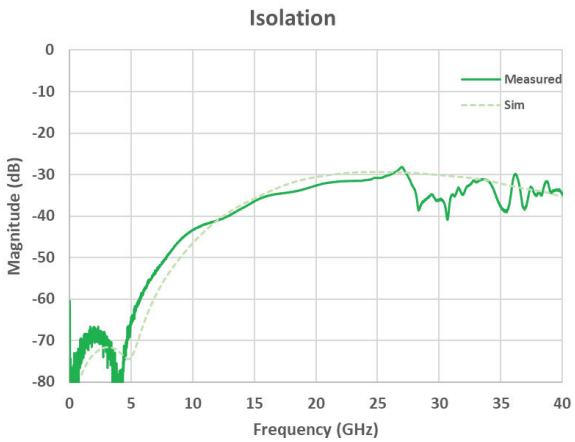
High Frequency RF Crossover Measured Results

Knowles new crossover can be used up to 40GHz! Increase throughput in communication applications and realize greater resolution for radar applications





WHY CHOOSE KNOWLES' CROSSOVER?

Our crossover enables integration into defense and space applications that operate in higher frequency bands such as X, Ku, K and Ka bands where currently available crossovers cannot operate.

Using Knowles' new crossover at higher frequency bands simplifies PCB signal routing and construction which helps to mitigate VSWR issues from transitioning in and out of loosely controlled multilayer board construction.

CONTACT KNOWLES TODAY!

For additional information or to request for samples, please contact **DLIengineering@knowles.com**

Visit our website at **knowlescapacitors.com** to view our RF/Microwave Products Catalog and for more information on this and our other vast product offerings.