

# 2-Way Wilkinson Divider / Combiner in Compact 1817 SMD Package Increases Efficiency, Saves Space in Aerospace, Defense, and Connectivity Applications; Operates From 15 GHz to 20 GHz and Provides Industry-Low Insertion Loss of < 0.5 dB Below 19 GHz

## Product Benefits:

- Wide 15 GHz to 20 GHz frequency range
- Low insertion loss of < 0.5 dB below 19 GHz
- Return loss of 10 dB to 15 dB
- Compact 1817 surface-mount package
- High < 20 dB output to output isolation at the center frequency
- Built on thin film technology
- Excellent matching characteristics across the entire operating band
- Wide temperature range of -55 °C to +155 °C
- Customization available
- HFSS-encrypted models available
- RoHS-compliant, halogen-free, and Vishay Green



## Market Applications:

- Automotive ADAS and radio transceivers; LEO satellites and base station terminals; 5G / 6G connectivity; drones; weapons guidance systems; payload systems; data link arrays; and phased-array radar systems

## The News:

Vishay Intertechnology introduces a new 2-way Wilkinson power divider / combiner designed to increase efficiency and save space in aerospace, defense, and high frequency connectivity applications. Operating over a broad 15 GHz to 20 GHz range, the Vishay Sfernice WLKN-000 delivers industry-low insertion loss of < 0.5 dB below 19 GHz in an integrated surface-mount package.

- With its wide frequency range and return loss of 10 dB to 15 dB, the WLKN-000 simplifies system designs, while reducing required external components to save board space and lower costs
- The device's 1817 package integrates a three-port solution to support both divider and combiner functionality, streamlining layouts
- The WLKN-000's low insertion loss enhances system efficiency by minimizing power dissipation throughout the signal path
- Unlike narrowband or resistor-based solutions, the device offers high output to output isolation to minimize crosstalk, protect downstream amplifiers during combining, and preserve stable performance across parallel RF paths
- The WLKN-000 can be customized based on customer specifications for frequency band, return loss, insertion loss, case size, and more



## The Key Specifications:

- Frequency range: 15 GHz to 20 GHz
- Insertion loss: < 0.5 dB below 19 GHz
- Return loss: 10 dB to 15 dB
- Package: 1817
- Output to output isolation: < 20 dB at the center frequency
- Operating temperature range: -55 °C to +155 °C

## Availability:

Samples and production quantities of the WLKN-000 are available now, with lead times of 20 weeks.

To access the product datasheet on the Vishay Website, go to <http://www.vishay.com/ppg?60170> (WLKN-000)

## Contact Information:

### THE AMERICAS

Edgardo Menendez  
[edgardo.menendez@vishay.com](mailto:edgardo.menendez@vishay.com)

Darin Tomita  
[darin.tomita@vishay.com](mailto:darin.tomita@vishay.com)

### EUROPE

Emmanuel Tarot  
[emmanuel.tarot@vishay.com](mailto:emmanuel.tarot@vishay.com)

Marco Sabene  
[marco.sabene@vishay.com](mailto:marco.sabene@vishay.com)

Christophe Cataldo  
[christophe.cataldo@vishay.com](mailto:christophe.cataldo@vishay.com)

### ASIA/PACIFIC

Kevin Guo  
[kevin.guo@vishay.com](mailto:kevin.guo@vishay.com)