

# IMK Series Surface Mount Thick Film Coupler

**ims** IMK Series Resistive Couplers provide the sensing function over a broad range of frequencies in a compact, easy to use component. With alumina construction, insertion loss is comparable to more complicated frequency sensitive couplers.



As with IMS attenuators, the IMK Series is engineered to optimize performance in two ways:

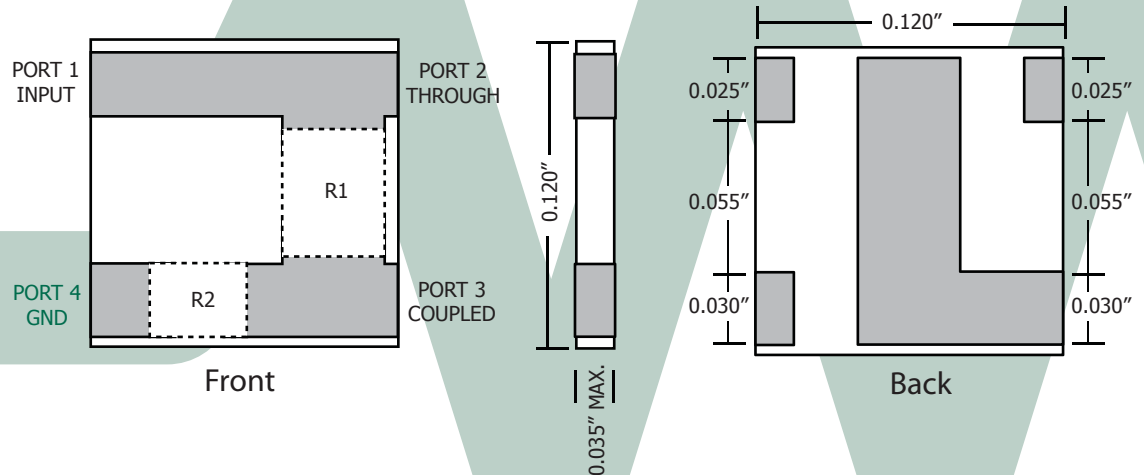
- 1) Resistive areas are constant and are specified for the lowest dB value ensuring that all couplers easily handle the incident RF power.
- 2) High inductance lines minimize ground path leakage and maintain low through loss.

The above constraints assure repeatability, reliability and optimal performance. The design and construction of these couplers is simplified to minimize cost and maximize efficiency.

## IMK2549 Specifications

Insertion Loss (ports 1 - 2):	1dB or less (values greater than 18dB)
Coupling Range:	6 - 30dB
Standard Size:	0.120" x 0.120" x 0.035" MAX
Impedance:	50Ω
Operating Frequency:	DC - 15GHz
dB Flatness:	See data on following pages
Operating Temperature:	-55°C to 150°C
Rated Power:	1W at 100°C Baseplate Temperature
VSWR (main line):	1.2:1 depending on implementation
Construction:	Thick Film on Alumina
Attachment:	Solder or Epoxy

## Dimensions



To  
**30dB**

**1W**

**Low Loss**

**Broad  
band**

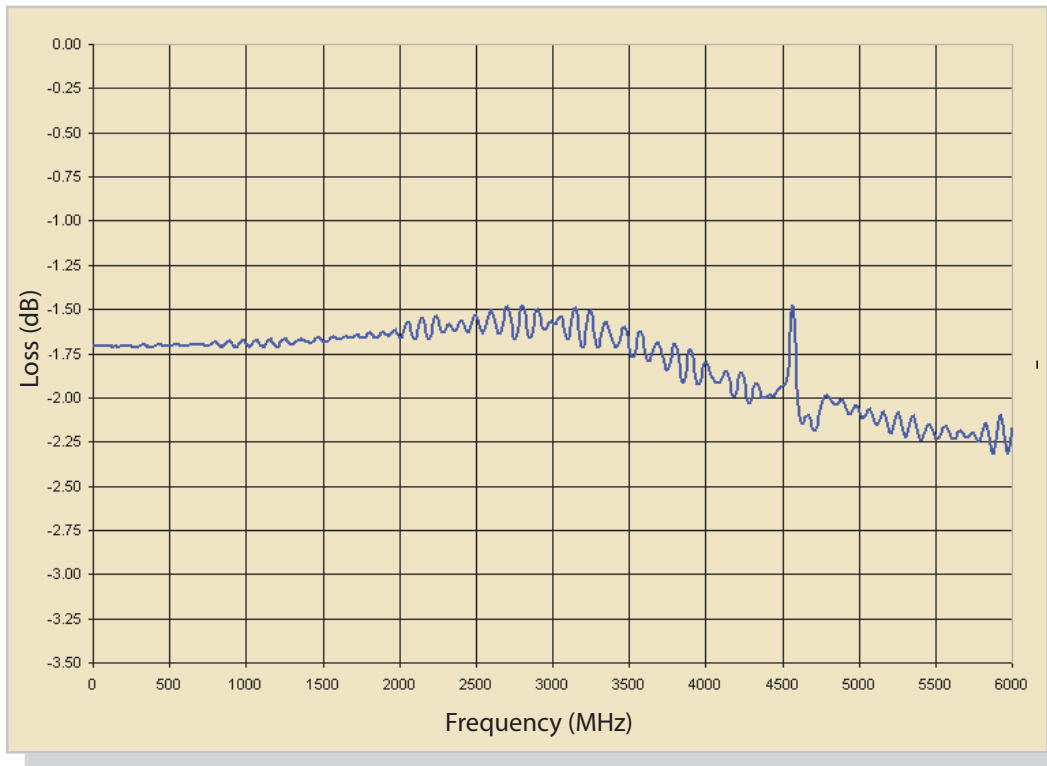
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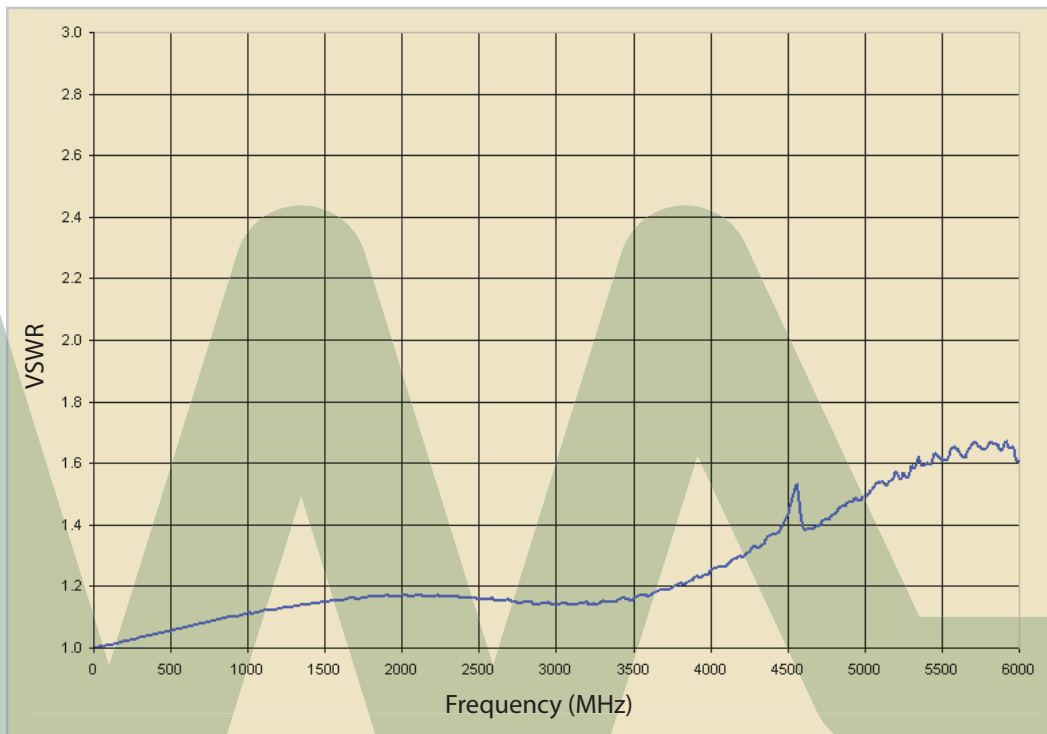
**impossible made simple™**

Ver 1 01/2010 Specifications Subject to Change Without Notice

## IMK2549-13DB Measured Insertion Loss



## IMK2549-13DB Measured VSWR



The above corrected data reflects performance of a 13dB coupler mounted in a matched continuous 50Ω system of duroid construction and SMA to microstrip transitions. Typically Insertion Loss improves with increasing nominal dB value.

**ims** International  
Manufacturing  
Services, Inc.

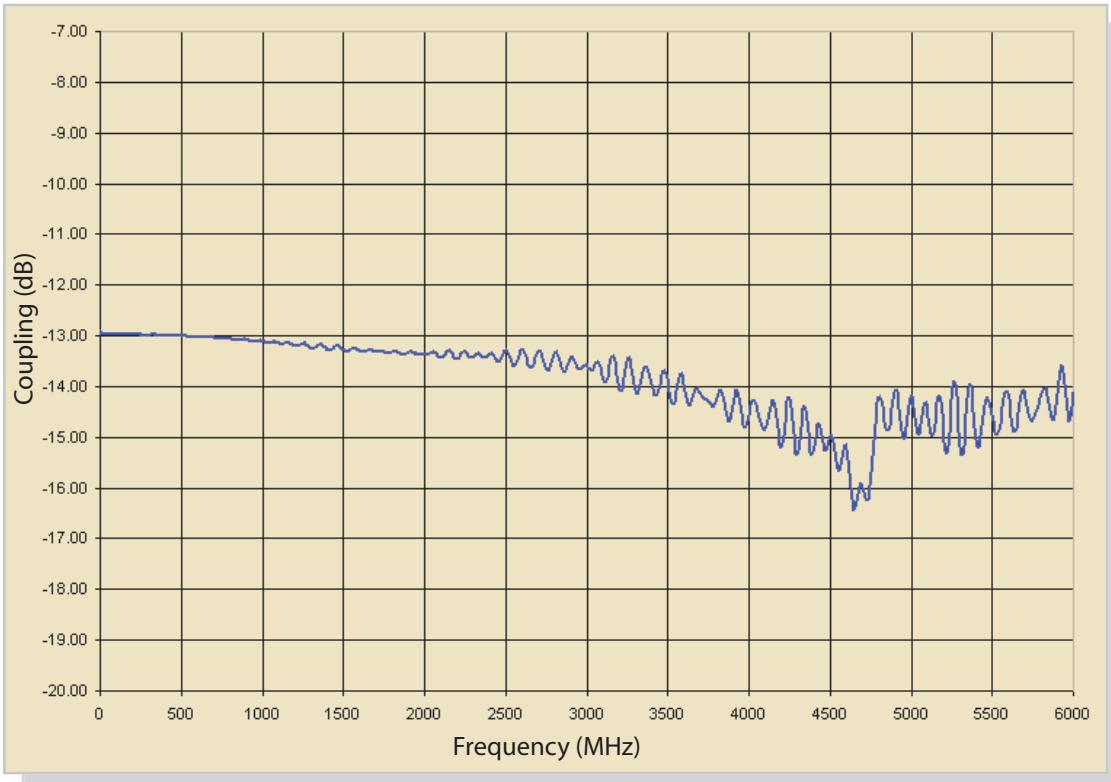
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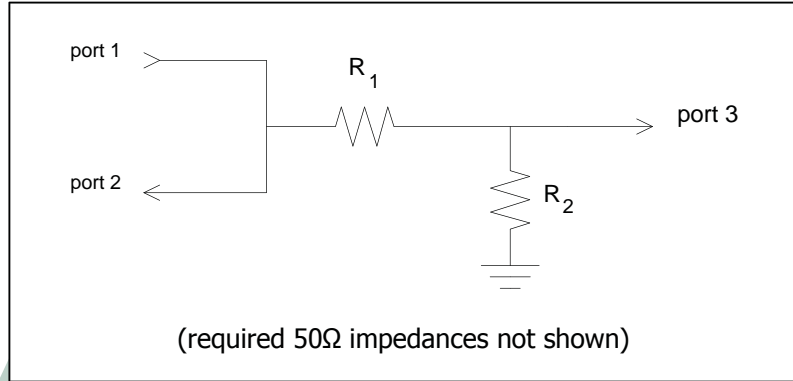
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### IMK2549-13DB Measured Coupling



The above corrected data reflects performance of a 13dB coupler mounted in a matched continuous 50Ω system of duroid construction and SMA to microstrip transitions.

### IMK2549-XXDB Electrical Schematic



#### Ordering Information

IMK2549-13DB (Sample P/N)  
IMK2549-XXDB

Part # \_\_\_\_\_ dB Value (06-30)