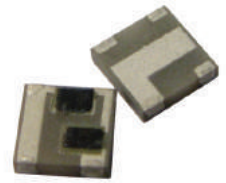


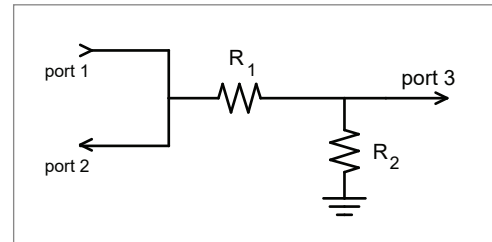
## FEATURES

ITEM	SPECIFICATION
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
Dissipated Power:	1W at 100°C baseplate temperature
VSWR (main line):	1.2:1 depending on implementation
Construction:	Thick film on alumina
Attachment <sup>1</sup> :	Solder, epoxy or wirebond

- Up to 30dB
- 1W Dissipated power
- Low loss
- Wideband



### IMK Series Electrical Schematic



(Required 50Ω impedances not shown)

1. Recommended through line power should not exceed 6W.

Part	Direction	Term Style	Term Material	Impedance	Frequency	Rated Power	Value Range
IMK2549	Right	Wraparound	PtAg	C = 50Ω	To 15GHz	1W Dissipated	06 to 30dB
IMK2550	Left	Wraparound	PtAg	C = 50Ω	To 15GHz	1W Dissipated	06 to 30dB
IMK2574	Right	Wraparound	Au (Inputs) PtAu (GND)	C = 50Ω	To 15GHz	1W Dissipated	06 to 30dB
IMK2575	Left	Wraparound	Au (Inputs) PtAu (GND)	C = 50Ω	To 15GHz	1W Dissipated	06 to 30dB
IMK2637	Right	Wraparound	PtAg w/ Sn62	C = 50Ω	To 15GHz	1W Dissipated	06 to 30dB
IMK2638	Left	Wraparound	PtAg w/ Sn62	C = 50Ω	To 15GHz	1W Dissipated	06 to 30dB
IMK2650	Left	Wraparound	PtAg w/ Sn96	C = 50Ω	To 15GHz	1W Dissipated	06 to 30dB
IMK2658	Left	Wraparound	ULR PtAg	C = 50Ω	To 15GHz	1W Dissipated	06 to 30dB
IMK2659	Left	Wraparound	ULR PtAg w/ Sn96	C = 50Ω	To 15GHz	1W Dissipated	06 to 30dB

## ORDERING INFORMATION

IMK2549-XXD0	
Part Number	dB Value (06-30)
✓ IMK2549	IMK2638
✓ IMK2550	✓ IMK2650
✓ IMK2574	✓ IMK2658
✓ IMK2575	✓ IMK2659
IMK2637	

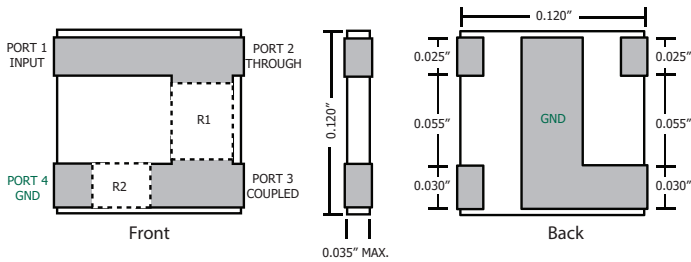
See the following pages for configurations and attachment options.

### Packaging

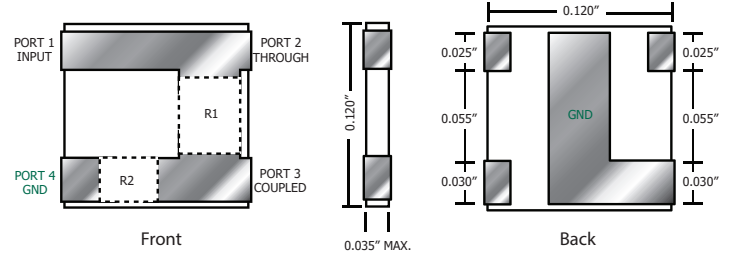
B=Bulk, T=Tape and Reel  
RoHS Compliant = ✓

RoHS NON-MAG BONDABLE

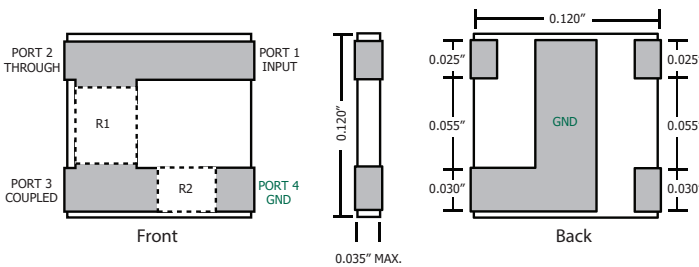
**IMK2549**  
Right Direction Version with PtAg Terminals for Solder or Epoxy Attachment



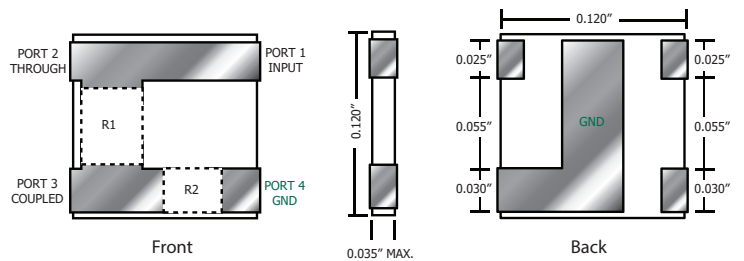
**IMK2637**  
Right Direction Version with Sn62 Solder Coated PtAg Terminals for Solder Attachment



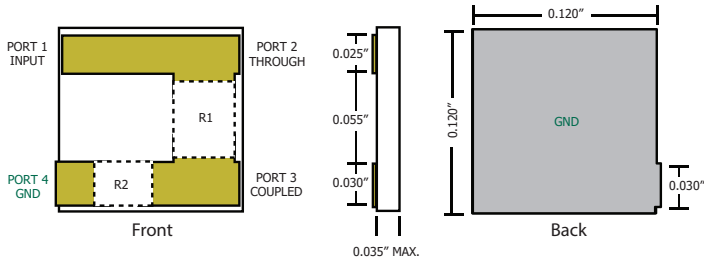
**IMK2550**  
Left Direction Version with PtAg Terminals for Solder or Epoxy Attachment



**IMK2638**  
Left Direction Version with Sn62 Solder Coated PtAg Terminals for Solder Attachment



**IMK2574**  
Right Direction Version for Wirebond

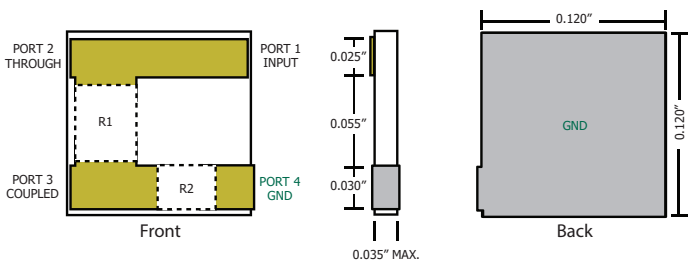


**IMK2650**  
Left Direction Version with Sn96 Solder Coated PtAg Terminals for Solder Attachment  
Same Dimensions as IMK2638

**IMK2658**  
Left Direction Version with URL PtAg Terminals for Solder Attachment  
Same Dimensions as IMK2638

**IMK2659**  
Left Direction Version with ULR PtAg w/ Sn96 Terminals for Solder Attachment  
Same Dimensions as IMK2638

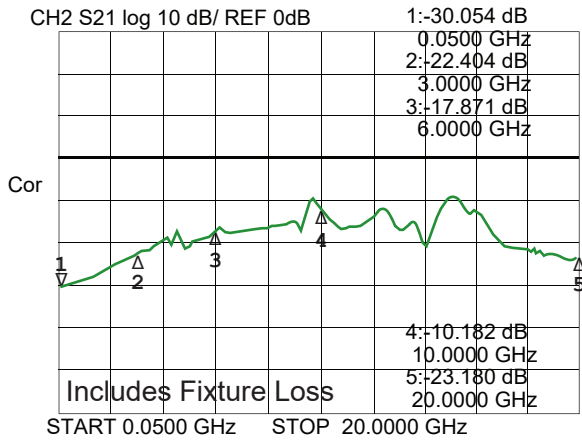
**IMK2575**  
Left Direction Version for Wirebond



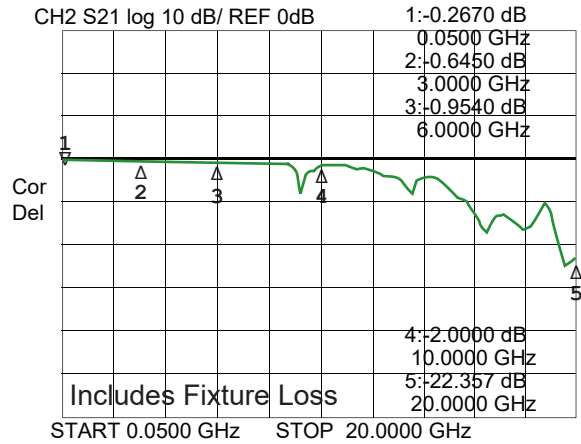
IMK2574 & IMK2575 feature Single-Sided Gold Wirebondable Terminals on Ports 1-3. Port 4 (GND) Wraps to Solder or Epoxyable Backplane.

*Drawings are for illustrative purposes only. Detailed dimensional information available from factory*

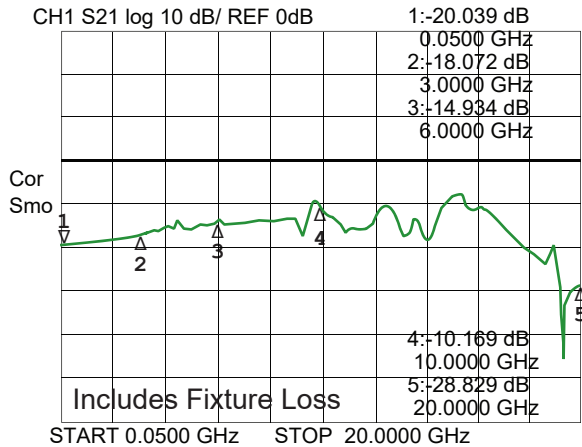
### IMK2549-30dB Coupling



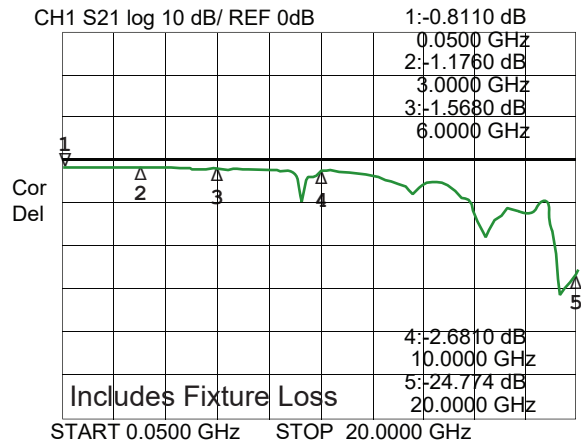
### IMK2549-30dB Measured Insertion Loss



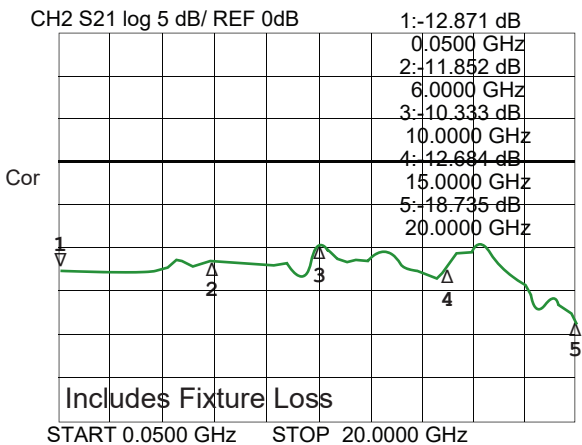
### IMK2549-20dB Coupling



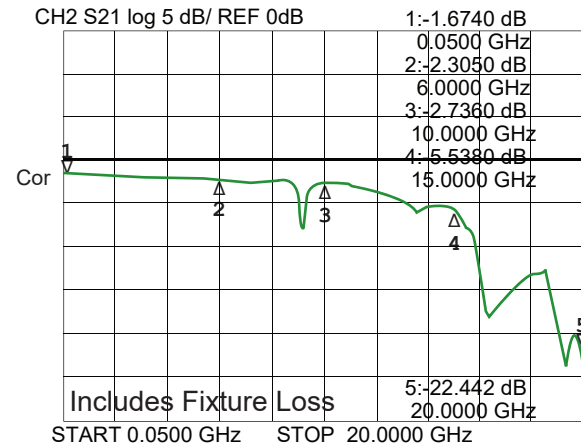
### IMK2549-20dB Measured Insertion Loss



### IMK2549-13dB Coupling



### IMK2549-13dB Measured Insertion Loss



Fixture loss was approximately 0.4dB at 6GHz, 0.8dB at 10GHz and 1.6dB at 15GHz. The above illustrations of corrected data reflect performance of a IMK2549 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.

Actual full-size response plots are available online at [www.ims-resistors.com](http://www.ims-resistors.com)