

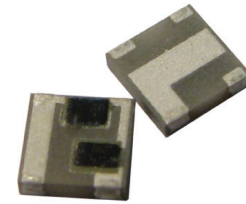
IMK Series

ims

Surface Mount Thick Film Coupler

Features

- Up to 30dB of coupling
- 1W Dissipated Power
- Low Loss
- Wideband



Thick Film



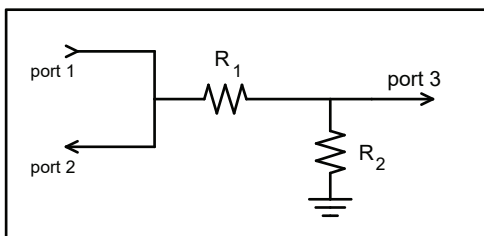
Item	Specification
Insertion Loss (ports 1 - 2):	1dB or less (values greater than 18dB)
Coupling Range:	6 - 30dB
Standard Size:	0.120" x 0.120" x 0.035" MAX
Impedance:	50Ω
Operating Frequency:	DC - 20GHz
dB Flatness:	See data on following pages
Operating Temperature:	-55°C to 150°C
Dissipated Power:	1W at 100°C Baseplate Temperature
VSWR (main line):	1.2:1 depending on implementation
Construction:	Thick Film on Alumina
Attachment:	Solder, Epoxy or Wirebond*

Recommended Through Line Power Should Not Exceed 6W

Ordering Information	
PN Prefix*	dB Value (06-30)
IMK2549 ✓	
IMK2550 ✓	
IMK2574 ✓	
IMK2575 ✓	
IMK2637	
IMK2638	

* See next page for configurations and attachment options

IMK Series Electrical Schematic



(required 50Ω impedances not shown)

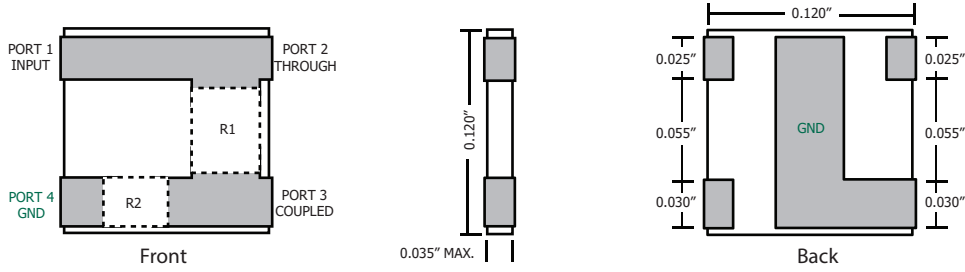
International Manufacturing Services, Inc.

50 Schoolhouse Ln., Portsmouth RI 02871 USA

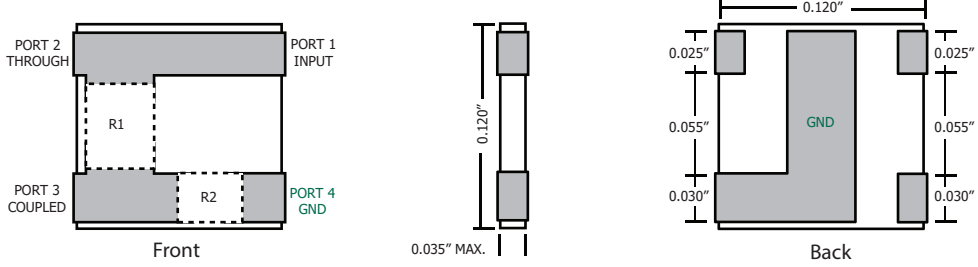
Tel (401) 683-9700 • Fax (401) 683-5571 • e-mail: ims@ims-resistors.com • www.ims-resistors.com

IMK ver. A 2/2017. Specifications subject to change without notice. • ISO9001:2008

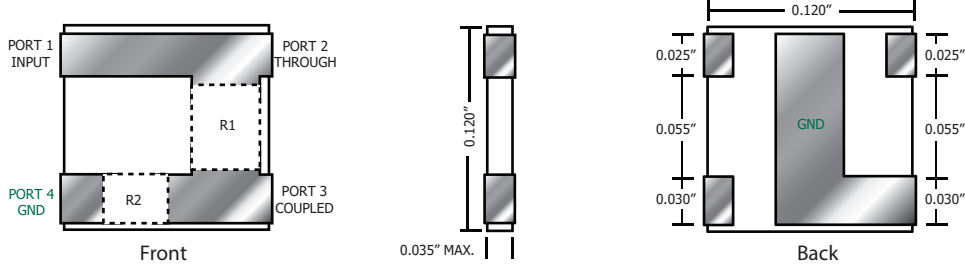
✓ **IMK2549 - Forward Version with PtAg Terminals for Solder or Epoxy Attachment**



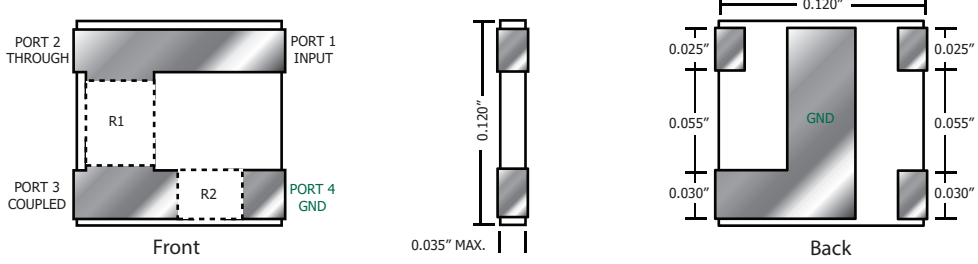
✓ **IMK2550 - Reverse Version with PtAg Terminals for Solder or Epoxy Attachment**



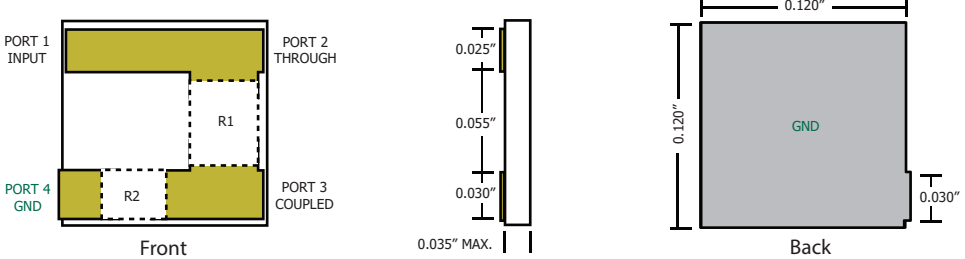
IMK2637 - Forward Version with Sn62 Solder Coated PtAg Terminals for Solder Attachment



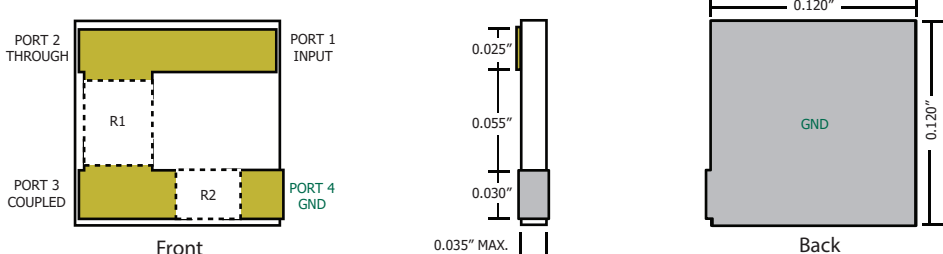
IMK2638 - Reverse Version with Sn62 Solder Coated PtAg Terminals for Solder Attachment



✓ **IMK2574 - Forward Version for Wirebond**



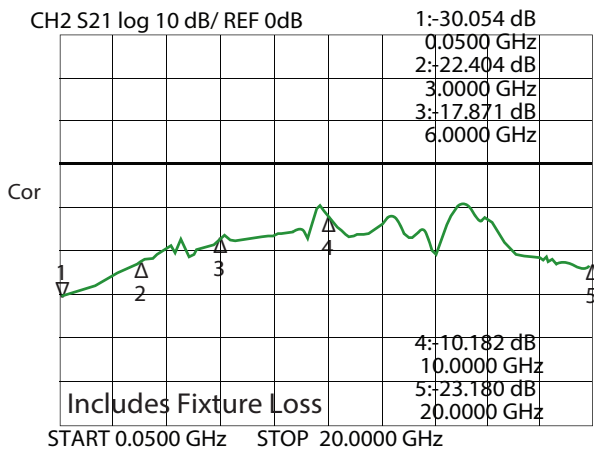
✓ **IMK2575 - Reverse Version for Wirebond**



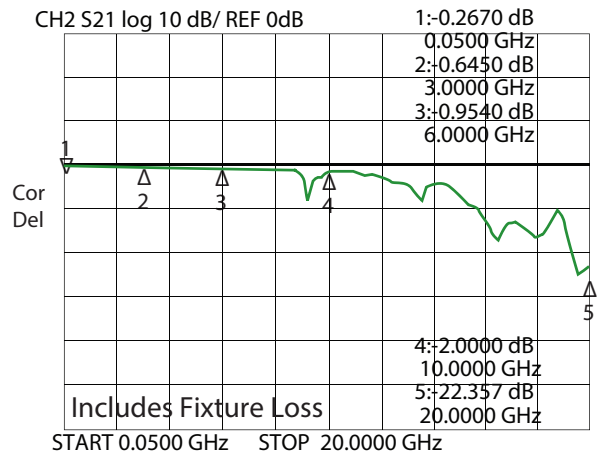
IMK2574 & IMK2575 feature Single-Sided Gold Wirebondable Terminals on Ports 1-3. Port 4 (GND) Wraps to Solder or Epoxyable Backplane.

DRAWINGS ARE FOR ILLUSTRATIVE PURPOSES ONLY.
DETAILED DIMENSIONAL INFORMATION AVAILABLE FROM FACTORY

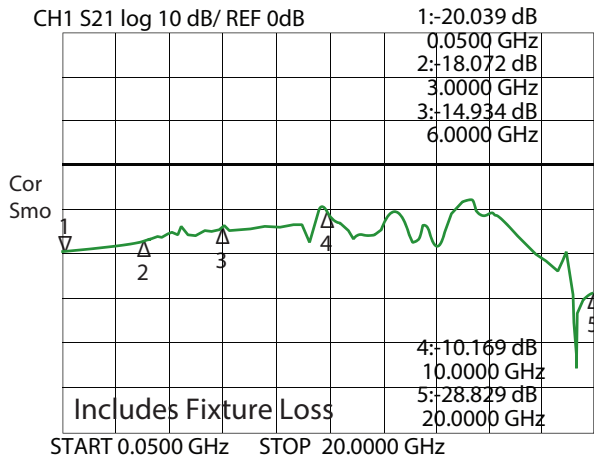
IMK2549-30dB Coupling



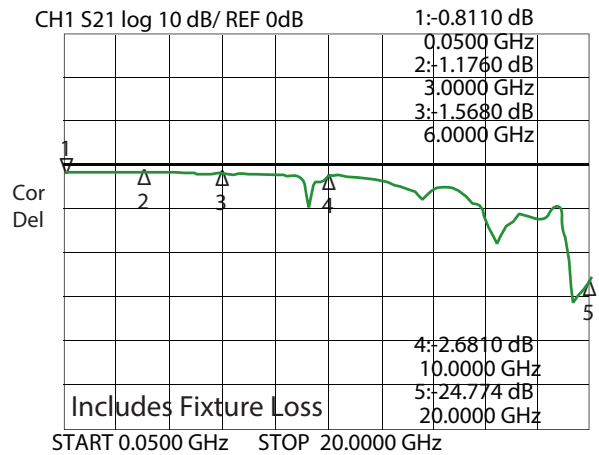
IMK2549-30dB Measured Insertion Loss



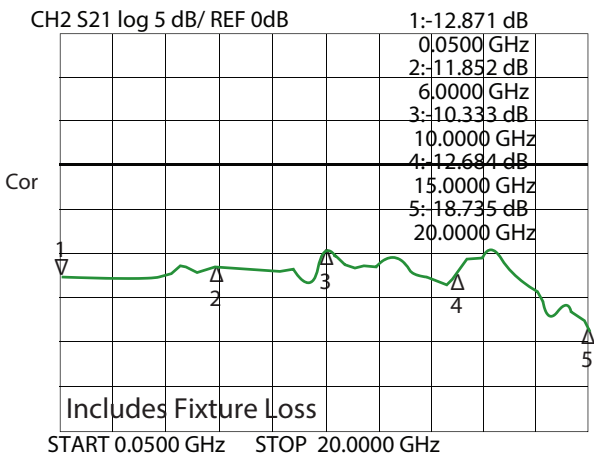
IMK2549-20dB Coupling



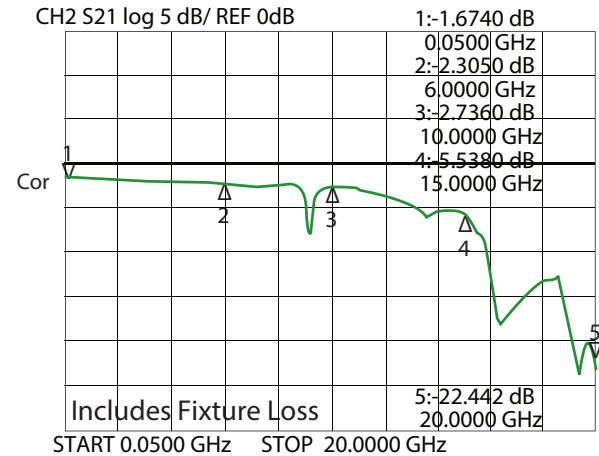
IMK2549-20dB Measured Insertion Loss



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