



75 Ohm F General Purpose Calibration  
Kit Including Short Circuit, Open Circuit, Load and  
Thru Components Operating From DC to 3 GHz

TECHNICAL DATA SHEET PE5CK1002

Pasternack's PE5CK1002 Calibration Kit offers excellent performance characteristics that is specially designed for the fine-tuning and calibration of sensitive test equipment in engineering labs, production environments, and quality testing facilities. All of our calibration kits are built to withstand years of rigorous use and provide accurate RF equipment calibration for the life of the product. Pasternack's broad portfolio of test and measurement components offer users a variety of options that are technically and economically suitable for a broad spectrum of RF applications and environments.

As a leading solutions provider of RF calibration instruments and compatible RF components, you can rely on Pasternack to have all of the T&M products you need in-stock and available to ship same-day.

**Features**

- Functional from DC to 3 GHz
- Standard kit includes (7) F Type short-open-load-thru (SOLT) components
- Suitable for many 75 Ohm network analyzers including, but not limited to:
- Agilent / HP (8711/8713/8714, 8753E-075, E5061A, E5062A, E 5061B)
- Rohde & Schwarz (R&S ZVL3-75 [9KHz - 3GHz, Built-in 85039B Calibration Kit Option])
- Tianda (TD3618C/E)
- OuFu (OF7631B, OF7633B)
- Copper Mountain (7530)
- Deviser (NA7300B, NA7100B)
- EI41 (AV36580A)
- PNA (PNA3766)

**Applications**

- VNA, Full 2-Port CAL
- VNA, Thru CAL
- VNA, Substitution CAL Method
- Test & Measurement
- Lab Equipment Accessories
- Engineering Test and Evaluation
- General Purpose Test and Evaluation

**Configuration**

Connector: F  
Impedance: 75 Ohms  
Frequency Range: DC to 3 GHz

**PE5CK1002 Standard Kit Specifications**

Part Number	Frequency Range	Connector Type	Connector Gender	Type	Impedance
PE5SC2004	DC - 3000 MHz	F Type	Female	Open	75 Ohm
PE5SC2005	DC - 3000 MHz	F Type	Male	Open	75 Ohm
PE5SC1004	DC - 3000 MHz	F Type	Female	Short	75 Ohm
PE5SC1005	DC - 3000 MHz	F Type	Male	Short	75 Ohm
PE5TR1004	DC - 3000 MHz	F Type	Female	Load	75 Ohm
PE5TR1005	DC - 3000 MHz	F Type	Male	Load	75 Ohm
PE5SC3005	DC - 3000 MHz	F Type	Female to Female	Thru	75 Ohm

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [75 Ohm F General Purpose Calibration Kit Including Short Circuit, Open Circuit, Load and Thru Components Operating From DC to 3 GHz PE5CK1002](#)





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## PE5SC2004 F Type Female Open Specifications



### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range		DC - 3000		MHz
Impedance		75		Ohm
Phase, DC - 1000 MHz	1°	Nominal	1°	Degrees
Phase, 1001 - 3000 MHz	2°	Nominal	2°	Degrees

### Mechanical Specifications

Item	Description	Units
Housing	Copper Tube	
Connector	75 Ohm F Type Female	
Connector Screw Thread	W3/8"-32 UNEF	Inch
Dimensions	0.63 [16] $\phi$ , 1.398 [35.5] L	Inch [mm]
Net Weight	35	g

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## PE5SC2005 F Type Male Open Specifications



### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range		DC - 3000		MHz
Impedance		75		Ohm
Phase, DC - 1000 MHz	1°	Nominal	1°	Degrees
Phase, 1001 - 3000 MHz	2°	Nominal	2°	Degrees

### Mechanical Specifications

Item	Description	Units
Housing	Copper Tube	
Connector	75 Ohm F Type Male	
Connector Screw Thread	W3/8"-32 UNEF	Inch
Dimensions	0.63 [16] $\phi$ , 1.626 [41.3] L	Inch [mm]
Net Weight	45.2	g

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## PE5SC1004 F Type Female Short Specifications



### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range		DC - 3000		MHz
Impedance		75		Ohm
Phase, DC - 1000 MHz	1°	Nominal	1°	Degrees
Phase, 1001 - 3000 MHz	2°	Nominal	2°	Degrees

### Mechanical Specifications

Item	Description	Units
Housing	Copper Tube	
Connector	75 Ohm F Type Female	
Connector Screw Thread	W3/8"-32 UNEF	Inch
Dimensions	0.63 [16] $\phi$ , 1.398 [35.5] L	Inch [mm]
Net Weight	36.6	g

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TECHNICAL DATA SHEET

PE5CK1002

## PE5SC1005 F Type Male Short Specifications



### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range		DC - 3000		MHz
Impedance		75		Ohm
Phase, DC - 1000 MHz	1°	Nominal	1°	Degrees
Phase, 1001 - 3000 MHz	2°	Nominal	2°	Degrees

### Mechanical Specifications

Item	Description	Units
Housing	Copper Tube	
Connector	75 Ohm F Type Male	
Connector Screw Thread	W3/8"-32 UNEF	Inch
Dimensions	0.63 [16] $\phi$ , 1.626 [41.3] L	Inch [mm]
Net Weight	47	g

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## PE5TR1004 F Type Female Load Specifications



### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range		DC - 3000		MHz
Impedance		75		Ohm
Return Loss, DC - 1000 MHz	38	40		dB
Return Loss, 1001 - 3000 MHz	36	38		dB

### Mechanical Specifications

Item	Description	Units
Housing	Copper Tube	
Connector	75 Ohm F Type Female	
Connector Screw Thread	W3/8"-32 UNEF	Inch
Dimensions	0.697 [17.7] $\phi$ , 1.532 [38.9] L	Inch [mm]
Net Weight	45.8	g

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## PE5TR1005 F Type Male Load Specifications



### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range		DC - 3000		MHz
Impedance		75		Ohm
Return Loss, DC - 1000 MHz	38	40		dB
Return Loss, 1001 - 3000 MHz	36	38		dB

### Mechanical Specifications

Item	Description	Units
Housing	Copper Tube	
Connector	75 Ohm F Type Male	
Connector Screw Thread	W3/8"-32 UNEF	Inch
Dimensions	0.697 [17.7] $\phi$ , 1.76 [44.7] L	Inch [mm]
Net Weight	54.6	g

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## PE5SC3005 F Type Female to Female Thru Specifications



### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC - 3000			MHz
Impedance	75			Ohm
Insertion Loss, DC - 3000 MHz		0.05	0.2	dB
Return Loss, DC - 1000 MHz	40	45		dB
Return Loss, 1001 - 3000 MHz	30	35		dB

### Mechanical Specifications

Item	Description	Units
Housing	Copper Tube	
Connector	75 Ohm F Type Female (Both Ends)	
Connector Screw Thread	W3/8"-32 UNEF	Inch
Dimensions	0.623 [15.8] $\phi$ , 1.402 [35.6] L	Inch [mm]
Net Weight	21.2	g

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## General Instructions and Usage Notes

#	Notes
1	Keep provided protective blue caps installed when not in use.
2	Store in climate controlled environment.
3	Always keep connectors clean.
4	Avoid touching the connector interface.
5	Use caution when handling.
6	For female components, do not insert male pin greater than 0.037" [.94 mm]. <b>Failure to comply will result in damage to the female connector.</b>
7	When mating, always ensure that the components to be interconnected remain in a fixed position while rotating <b>only the coupling nut</b> slowly to mate the connectors.
8	When de-mating, always ensure that the interconnected components remain in a fixed position while rotating <b>only the coupling nut</b> slowly to de-mate the connectors.
9	Visually inspect the connector threads prior to use. If needed, clean the center conductor pin and outer conductor with alcohol to remove any debris that may be present. <b>Be sure to apply the alcohol in a circular motion with a lint-free cloth or applicator.</b>
10	Use at room temperature.

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TECHNICAL DATA SHEET

PE5CK1002

Typical Performance Data

**PE5TR1004 Return Loss**  
**Span: 3000 MHz**



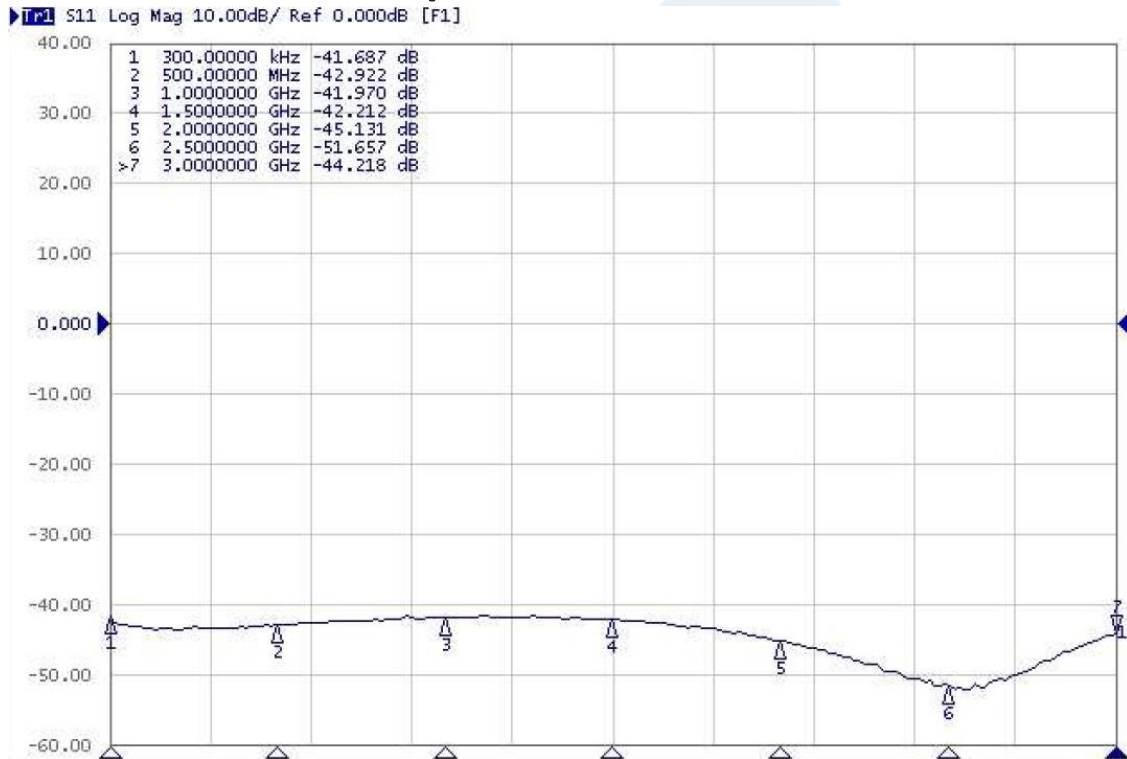
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## PE5TR1005 Return Loss Span: 3000 MHz

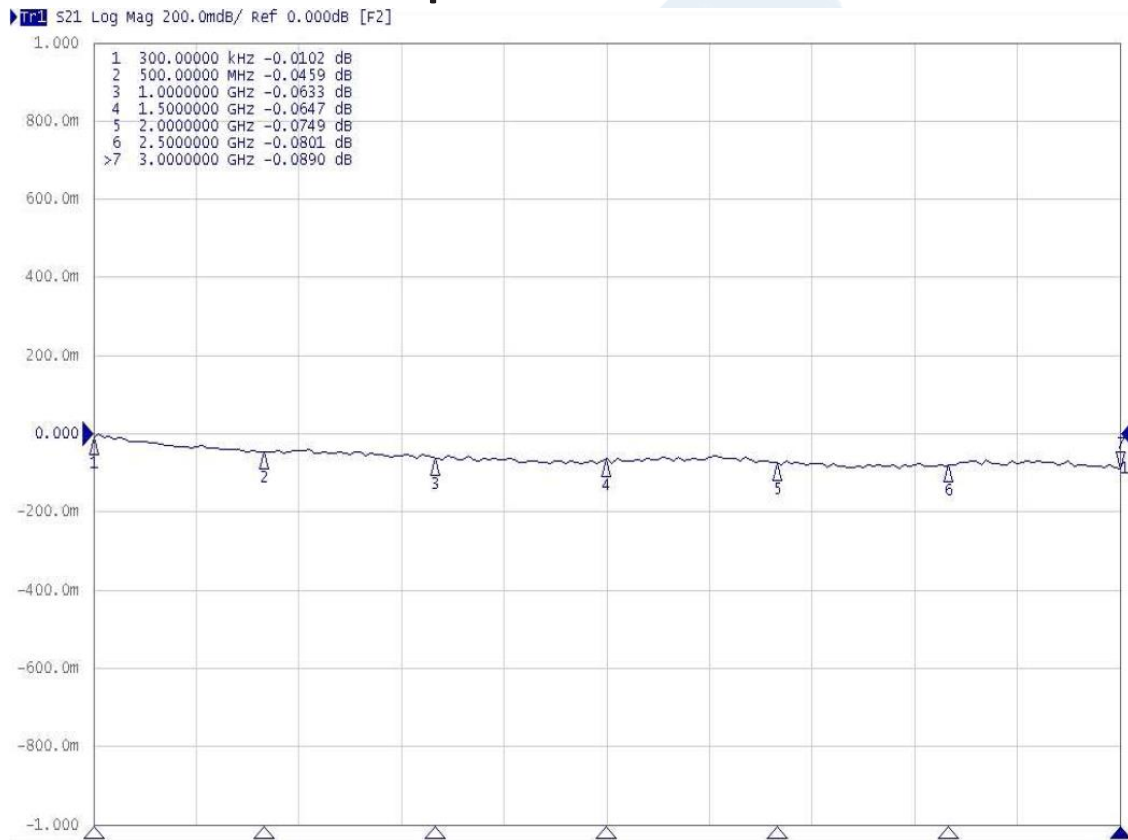


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## PE5SC3005 Insertion Loss Span: 3000 MHz



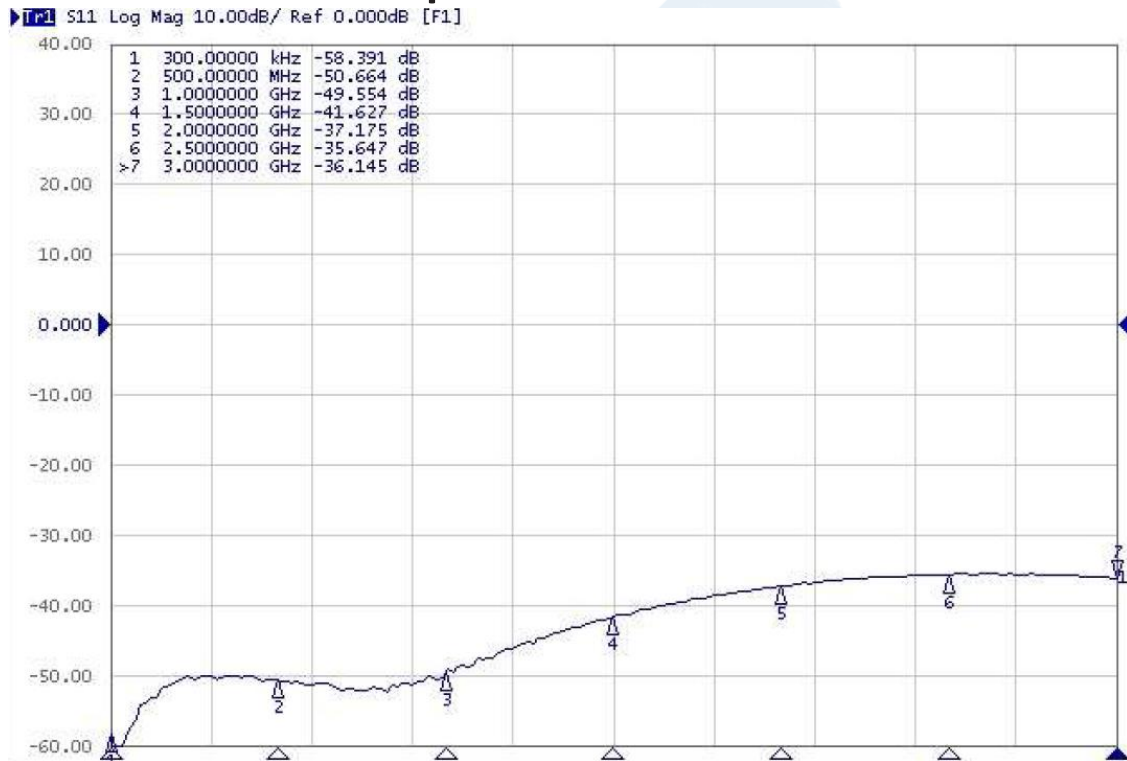
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## PE5SC3005 Return Loss Span: 3000 MHz



**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

RoHS Compliant  
REACH Compliant

06/16/2014

### Plotted and Other Data

Notes:

- Values at +25 °C, sea level

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TECHNICAL DATA SHEET

PE5CK1002

75 Ohm F General Purpose Calibration Kit Including Short Circuit, Open Circuit, Load and Thru Components Operating From DC to 3 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.