

Plenum N Male to N Male Right Angle  
Low PIM Cable 50 cm Length Using SPP-250-LLPL  
Coax Using Times Microwave Parts



**PE3C6205-50CM**

**Configuration**

- Connector 1: N Male TC-250-NM-LP
- Connector 2: N Male Right Angle TC-SPP250-NM-RA-LP
- Cable Type: SPP-250-LLPL
- Coax Flex Type: Corrugated

**Features**

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 100 dB
- 76% Phase Velocity
- FEP Jacket
- 100% Tested with PIM Test Results Marked on Cable
- UL910 Plenum Rated Cable
- Lightweight and Extremely Flexible
- Low Loss with Excellent VSWR
- IP67 (when mated)
- Using Times Microwave Components



**Applications**

- General Purpose
- Laboratory Use
- Low PIM Applications
- Distributed Antenna Systems (DAS)
- Plenum Installations
- Multi-Carrier Communication Systems
- PIM Testing

**Description**

Pasternack's PE3C6205-50CM type N male to type N male right angle 50 cm cable using SPP-250-LLPL coax is part of our full line of RF components available for same-day shipping. Pasternack's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Pasternack type N to type N cable assembly has a male to male gender configuration with 50 ohm corrugated SPP-250-LLPL coax. The PE3C6205-50CM type N male to type N male cable assembly operates to 5.8 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc. The right angle type N interface on the SPP-250-LLPL cable allows for easier connections in tight spaces. Times Microwave cable is used in each assembly and TMS components are used to form connections with the super flexible low PIM cable. These cable assemblies are expertly built to satisfy your specific need with high quality Times Microwave Systems manufactured parts.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%

Plenum N Male to N Male Right Angle  
Low PIM Cable 50 cm Length Using SPP-250-LLPL  
Coax Using Times Microwave Parts



## PE3C6205-50CM

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
RF Shielding	100			dB
Passive Intermodulation IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz		-165	-160	dBc
Capacitance		27 [88.58]		pF/ft [pF/m]
Inductance		0.067 [0.22]		uH/ft [uH/m]
DC Resistance Inner Conductor		3 [9.84]		Ohms/1000ft [Ohms/Km]

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.26	0.29	0.32	0.44	0.62	dB

Electrical Specification Notes:

PIM test results vary between cables

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. The Insertion Loss includes an estimated insertion loss of  $0.1 \cdot \sqrt{\text{FGHz}}$  dB for the straight connector and 0.12 for the right angle connector.

### Mechanical Specifications

#### Cable Assembly

Width/Diameter	.94 in [23.88 mm]
Weight	0.32 lbs [145.15 g]

#### Cable

Cable Type	SPP-250-LLPL
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PTFE
Number of Shields	1
Shield Layer 1	Helically Corrugated Copper Tube
Outer Conductor 1 Material and Plating	Copper
Outer Conductor Diameter	0.25 in [6.35 mm]
Jacket Material	FEP, Blue
Jacket Diameter	0.28 in [7.11 mm]
One Time Minimum Bend Radius	1.25 in [31.75 mm]
Bending Moment	0.8 lbs-ft [1.08 N-m]

Plenum N Male to N Male Right Angle  
Low PIM Cable 50 cm Length Using SPP-250-LLPL  
Coax Using Times Microwave Parts



## PE3C6205-50CM

### Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Phosphor Bronze, Silver	Phosphor Bronze, Silver
Contact Plating Specification	196 $\mu$ in	196 $\mu$ in
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	118 $\mu$ in	118 $\mu$ in
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	118 $\mu$ in	118 $\mu$ in
Torque	9.74 in-lbs 1.1 Nm	10 in-lbs 1.13 Nm

### Environmental Specifications

Operating Range Temperature	-55 to +200 deg C
Storage Range Temperature	-55 to +200 deg C
Plenum Rating	UL910

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:  
Values at 25°C, sea level.

Plenum N Male to N Male Right Angle  
Low PIM Cable 50 cm Length Using SPP-250-LLPL  
Coax Using Times Microwave Parts



## PE3C6205-50CM

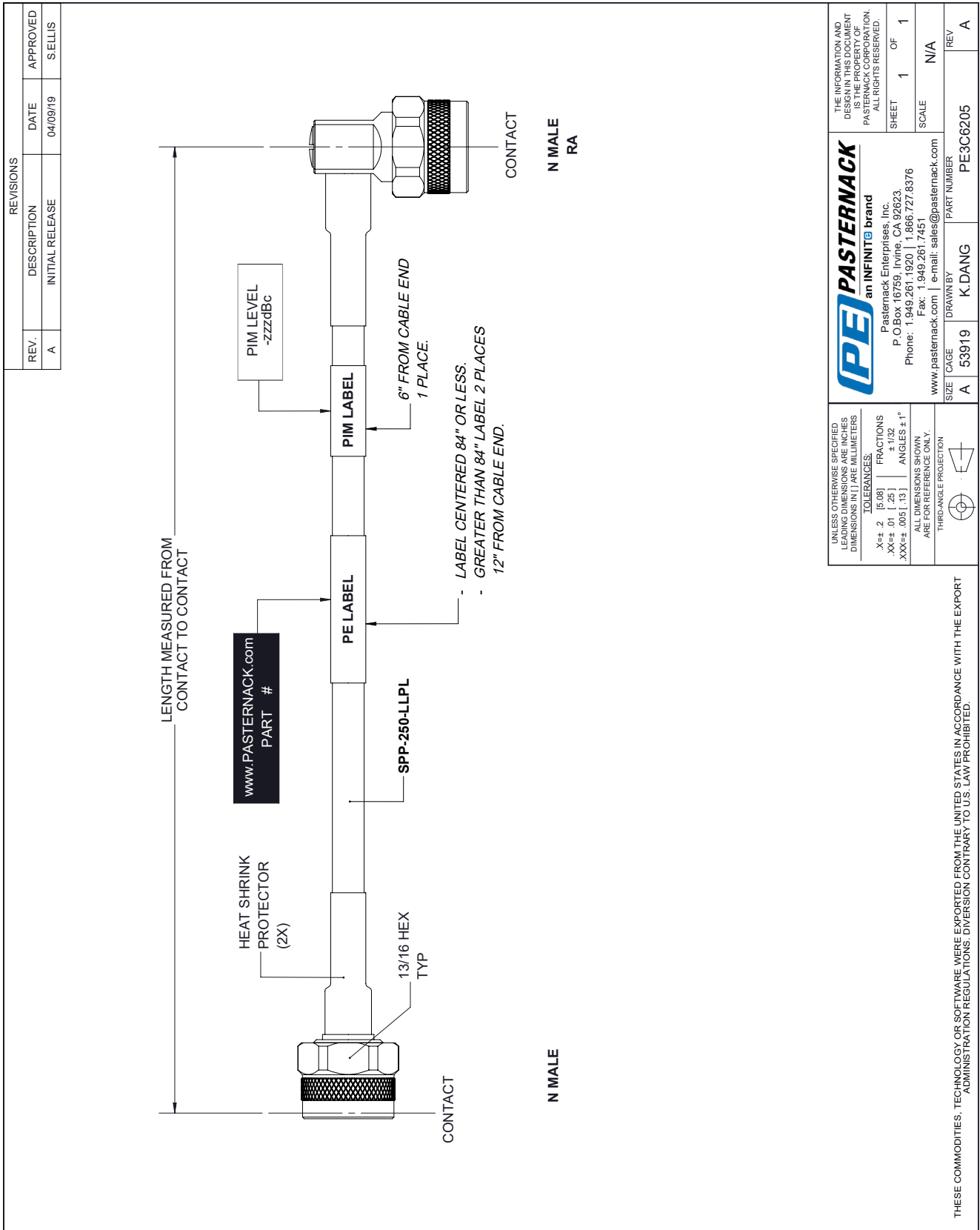
### Typical Performance Data





# PE3C6205-50CM CAD Drawing

Plenum N Male to N Male Right Angle Low PIM Cable 50 cm Length  
Using SPP-250-LLPL Coax Using Times Microwave Parts



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	04/09/19	S.ELLIS

UNLESS OTHERWISE SPECIFIED  
LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

**TOLERANCES:**  
.X±.2 [ 5.08] FRACTIONS ± 1/32  
.XX±.01 [ .25] ANGLES ± 1°  
.XXX±.005 [ .13] ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.

SHEET 1 OF 1  
SCALE N/A

www.pasternack.com | e-mail: sales@pasternack.com

SIZE	CAGE	DRAWN BY	PART NUMBER	REV
A	53919	K.DANG	PE3C6205	A

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

T-Rev.B