

## SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188



### RF Connectors Technical Data Sheet

**PE45209**

#### Configuration

- SSMC Plug Connector
- 50 Ohms
- Straight Body Geometry

- Connector Interface Types: RG316, RG174, RG188
- 5/32 inch Hex

#### Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.5:1

- Gold Plated Beryllium Copper Contact

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE45209 SSMC plug connector with crimp/solder attachment for RG316, RG174 and RG188 is part of our full line of RF components available for same-day shipping. Our SSMC plug connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.5:1.

Our SSMC plug connector PE45209 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### Electrical Specifications

| Description           | Minimum | Typical | Maximum | Units |
|-----------------------|---------|---------|---------|-------|
| Frequency Range       | DC      |         | 12.4    | GHz   |
| VSWR                  |         |         | 1.5:1   |       |
| Insulation Resistance | 1,000   |         |         | MOhms |

#### Mechanical Specifications

##### Size

|               |                    |
|---------------|--------------------|
| Length        | 0.94 in [23.88 mm] |
| Width/Dia.    | 0.156 in [3.96 mm] |
| Weight        | 0.0033 lbs [1.5 g] |
| Mating Cycles | 500 Cycles         |
| Mating Torque | 1 in-lbs [0.11 Nm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188 PE45209](#)

SSMC Plug Connector Crimp/Solder  
Attachment for RG316, RG174, RG188



**RF Connectors**  
**Technical Data Sheet**

**PE45209**

**Material Specifications**

| Description  | Material         | Plating |
|--------------|------------------|---------|
| Contact      | Beryllium Copper | Gold    |
| Insulation   | PTFE             |         |
| Body         | Beryllium Copper | Gold    |
| Coupling Nut | Beryllium Copper | Gold    |

**Environmental Specifications**

**Temperature**

Operating Range -45 to +120 deg C

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

**Plotted and Other Data**

Notes:

SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188 PE45209](#)

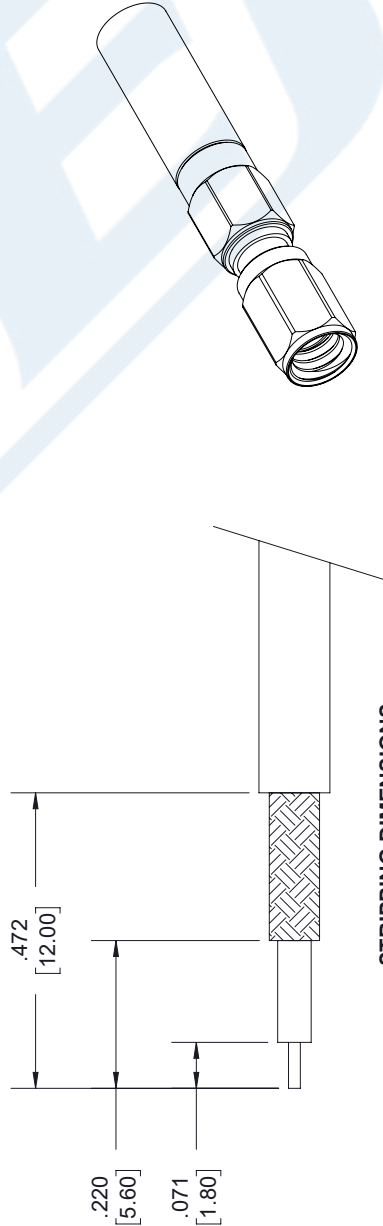
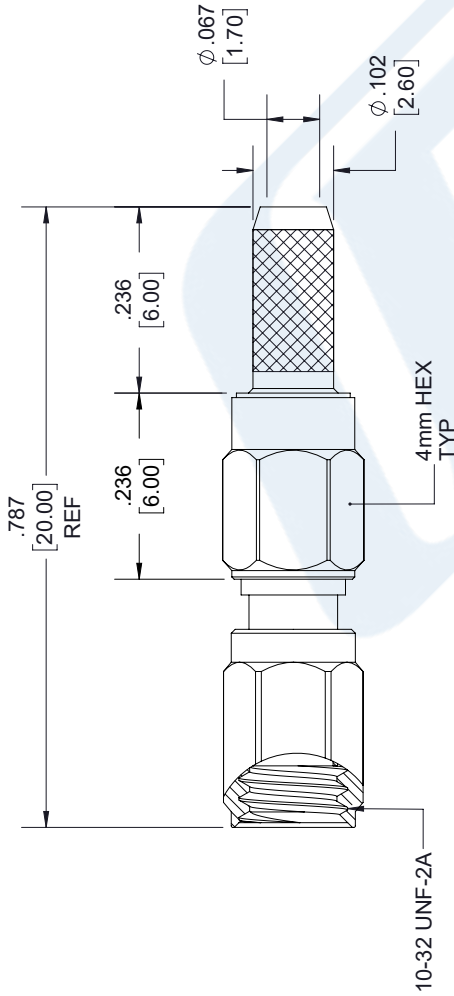
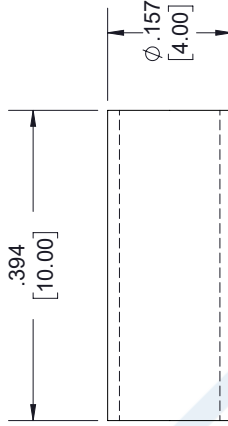
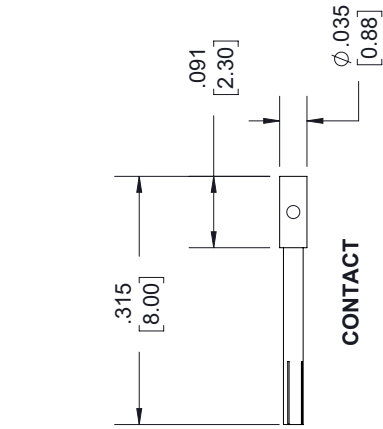
URL: <https://www.pasternack.com/ssmc-male-rg316-rg174-rg188-connector-pe45209-p.aspx>

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.

# PE45209 CAD Drawing

SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188

| REV. | DESCRIPTION         | DATE     | APPROVED |
|------|---------------------|----------|----------|
| A    | PCR PE45209 2011127 | 12/13/19 | SELLIS   |



## NOTES:

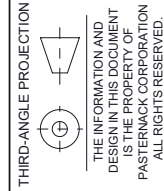
- CABLE ATTACHMENT:
  - OUTER: CRIMP.
  - INNER: SOLDER.
- CRIMP SIZE REQUIRED:
  - FERRULE: .134 [3.40] HEX. CRIMP TOOL.
  - CONTACT: SOLDER.

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

| TOLERANCES:                                     | FRACTIONS   |
|-------------------------------------------------|-------------|
| .X = ± .2                                       | [.508]      |
| .XX = ± .02                                     | [.51]       |
| .XXX = ± .005                                   | [.13]       |
| CABLE LENGTH (L) TOLERANCES:                    | ANGLES ± 1° |
| L ≤ 12 [305]                                    | ± 1/32      |
| 12 [305] < L ≤ 60 [1524]                        | ± 1/16      |
| 60 [1524] < L ≤ 120 [3048]                      | ± 1/8       |
| 120 [3048] < L ≤ 300 [7620]                     | ± 1/4       |
| 300 [7620] < L ≤ ∞                              | ± 5% L / -0 |
| ALL DIMENSIONS SHOWN<br>ARE FOR REFERENCE ONLY. |             |



Pasternack Enterprises, Inc.  
P.O. Box 16759, Irvine, CA 92623.  
Phone: 1.949.261.1920 | 1.866.727.8376  
Fax: 1.949.261.7451  
Website: [www.pasternack.com](http://www.pasternack.com)  
E-mail: [sales@pasternack.com](mailto:sales@pasternack.com)



|       |     |    |   |
|-------|-----|----|---|
| SHEET | 1   | OF | 1 |
| SCALE | N/A |    |   |
| REV   | 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.



SMC Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch

## RF Connectors Technical Data Sheet

**PE4045**

### Configuration

- SMC Plug Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .100 inch
- 1/4 inch Hex

### Features

- Max. Operating Frequency 3 GHz
- Good VSWR of 1.3:1
- Gold Plated Beryllium Copper Contact
- 30 µin minimum contact plating

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE4045 SMC plug connector with crimp/solder attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100 and .100 inch is part of our full line of RF components available for same-day shipping. Our SMC plug connector operates up to a maximum frequency of 3 GHz and offers good VSWR of 1.3:1.

Our SMC plug connector PE4045 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

### Electrical Specifications

| Description            | Minimum | Typical | Maximum | Units |
|------------------------|---------|---------|---------|-------|
| Frequency Range        | DC      |         | 3       | GHz   |
| VSWR                   |         |         | 1.3:1   |       |
| Operating Voltage (AC) |         |         | 335     | Vrms  |

### Mechanical Specifications

#### Size

|               |                    |
|---------------|--------------------|
| Length        | 0.78 in [19.81 mm] |
| Width/Dia.    | 0.25 in [6.35 mm]  |
| Weight        | 0.011 lbs [4.99 g] |
| Mating Torque | 3 in-lbs [0.34 Nm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMC Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4045](#)



SMC Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch

## RF Connectors Technical Data Sheet

**PE4045**

### Material Specifications

| Description  | Material         | Plating                   |
|--------------|------------------|---------------------------|
| Contact      | Beryllium Copper | Gold<br>30 µin minimum    |
| Insulation   | PTFE             |                           |
| Body         | Brass            | Nickel<br>100 µin minimum |
| Coupling Nut | Brass            | Nickel<br>100 µin minimum |

### Environmental Specifications

#### Temperature

Operating Range

-65 to +165 deg C

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

### Plotted and Other Data

Notes:

SMC Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

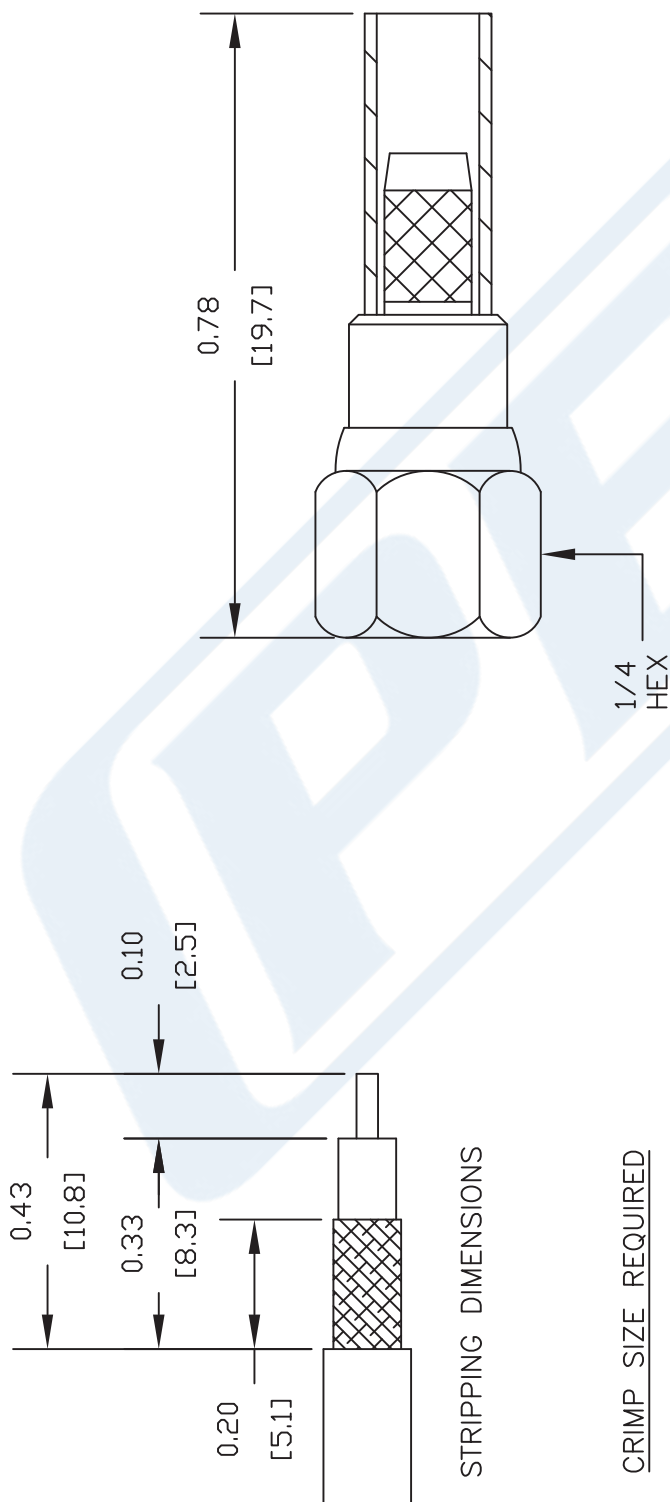
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMC Plug Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4045](#)

URL: <https://www.pasternack.com/smc-plug-standard-rg174-rg316-rg188-connector-pe4045-p.aspx>

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.

# PE4045 CAD Drawing

SMC Plug Connector Crimp/Solder Attachment for RG174, RG316,  
RG188, LMR-100, PE-B100, PE-C100, 0.100 inch



STRIPPING DIMENSIONS

CRIMP SIZE REQUIRED

CONTACT: SOLDER  
FERRULE: .128" HEX CRIMP TOOL



Pasternack Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623  
Phone: (949) 261-1920 | Fax: (949) 261-7451  
Website: [www.pasternack.com](http://www.pasternack.com) | E-Mail: [sales@pasternack.com](mailto:sales@pasternack.com)

DWG TITLE

**PE4045**

NOTES:  
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].  
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

REV. -

FSCM NO. 53919

CAD FILE 071505

SCALE N/A

SIZE A

127

## Low Loss Flexible LMR-100A-PVC Indoor/Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket



### LMR-100A-PVC

#### Times Microwave Systems Coax Cable Specification

##### Configuration

- Low Loss, Indoor/Outdoor Flexible Cable
- 2 Shield(s)

##### Features

- Max Operating Frequency of 8 GHz
- Low Loss Cable
- Phase Velocity 66% VoP

##### Applications

- Laboratory Applications
- General Purpose RF Interconnect

##### Description

LMR-100A-PVC part number from Pasternack is a LMR-100A-PVC coax cable that is flexible. Pasternack LMR-100A flexible coax cable is 50 Ohm and has a PE dielectric. Our LMR-100A coax is constructed with a 0.11 jacket made of PVC. LMR-100A coax has a shield count of 2, a RF shielding of 90 dB and the maximum frequency for this Pasternack cable is 8 GHz. LMR-100A coax cable has an attenuation at 1 GHz of 24 dB.

Pasternack LMR-100A-PVC coax cables are part of over 40,000 RF, microwave and millimeter wave components. LMR-100A cables and our other RF parts are available for same day shipping worldwide. Custom RF cable assemblies using LMR-100A or other coax can be built and shipped same day as well.

#### Electrical Specifications

| Description                          | Minimum | Typical       | Maximum | Units        |
|--------------------------------------|---------|---------------|---------|--------------|
| Frequency Range                      | DC      |               | 8       | GHz          |
| Cutoff Frequency                     |         | 90            |         | GHz          |
| Impedance                            |         | 50            |         | Ohms         |
| Velocity of Propagation              |         | 66            |         | %            |
| Time Delay                           |         | 1.54 [5.05]   |         | ns/ft [ns/m] |
| Shielding Effectiveness              | 90      |               |         | dB           |
| Dielectric Withstanding Voltage (DC) |         |               | 500     | Vdc          |
| Jacket Spark                         |         |               | 2,000   | Vrms         |
| Inner Conductor DC Resistance        |         |               | 81      | Ohms/1000ft  |
| Outer Conductor DC Resistance        |         |               | 9.5     | Ohms/1000ft  |
| Nominal Capacitance                  |         | 30.8 [101.05] |         | pF/ft [pF/m] |
| Nominal Inductance                   |         | 0.077 [0.25]  |         | uH/ft [uH/m] |
| Input Power (Peak)                   |         |               | 600     | Watts        |

## Low Loss Flexible LMR-100A-PVC Indoor/Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket



### LMR-100A-PVC

#### Performance by Frequency Band

| Description           | F1   | F2   | F3    | F4    | F5   | Units    |
|-----------------------|------|------|-------|-------|------|----------|
| Frequency             | 50   | 150  | 220   | 450   | 900  | MHz      |
| Attenuation, Typ      | 3.9  | 8.9  | 10.9  | 15.8  | 22.8 | dB/100ft |
|                       | 12.8 | 29.2 | 35.76 | 51.84 | 74.8 | dB/100m  |
| Input Power (CW), Max | 230  | 100  | 83    | 57    | 39   | Watts    |

| Description           | F6    | F7     | F8     | F9     | F10   | Units    |
|-----------------------|-------|--------|--------|--------|-------|----------|
| Frequency             | 1.5   | 1.8    | 2      | 2.5    | 5.8   | GHz      |
| Attenuation, Typ      | 30.1  | 33.2   | 35.2   | 39.8   | 64.1  | dB/100ft |
|                       | 98.75 | 108.92 | 115.49 | 130.58 | 210.3 | dB/100m  |
| Input Power (CW), Max | 29    | 27     | 25     | 22     | 13    | Watts    |

#### Mechanical Specifications

|                                 |                          |
|---------------------------------|--------------------------|
| Diameter                        | 0.11 in [2.79 mm]        |
| Weight                          | 0.009 lbs/ft [0.01 kg/m] |
| Min. Bend Radius (Installation) | 0.25 in [6.35 mm]        |
| Min. Bend Radius (Repeated)     | 1 in [25.4 mm]           |
| Bending Moment                  | 0.1 lbs-ft [0.14 N-m]    |
| Tensile Strength                | 15 lbs [6.8 kg]          |
| Flat Plate Crush                | 10 lbs/in [0.18 kg/mm]   |

#### Construction Specifications

| Description     | Material and Plating        | Diameter           |
|-----------------|-----------------------------|--------------------|
| Inner Conductor | Copper Clad Steel, 1 Strand | 0.018 in [0.46 mm] |
| Conductor Type  | Solid                       |                    |
| Dielectric      | PE                          | 0.06 in [1.52 mm]  |
| First Shield    | Aluminum Tape               |                    |
| Second Shield   | Tinned Copper Braid         |                    |
| Jacket          | PVC, Black                  | 0.11 in [2.79 mm]  |

#### Environmental Specifications

|                    |                  |
|--------------------|------------------|
| <b>Temperature</b> |                  |
| Operating Range    | -40 to +85 deg C |
| Storage Range      | -70 to +85 deg C |

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

#### Plotted and Other Data

Notes:

## Low Loss Flexible LMR-100A-PVC Indoor/Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket



### LMR-100A-PVC

Low Loss Flexible LMR-100A-PVC Indoor/Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss Flexible LMR-100A-PVC Indoor/Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket LMR-100A-PVC](#)

URL: <https://www.pasternack.com/50-ohm-low-loss-flexible-lmr-100apvc-jacket-double-shielded-lmr-100a-pvc-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.