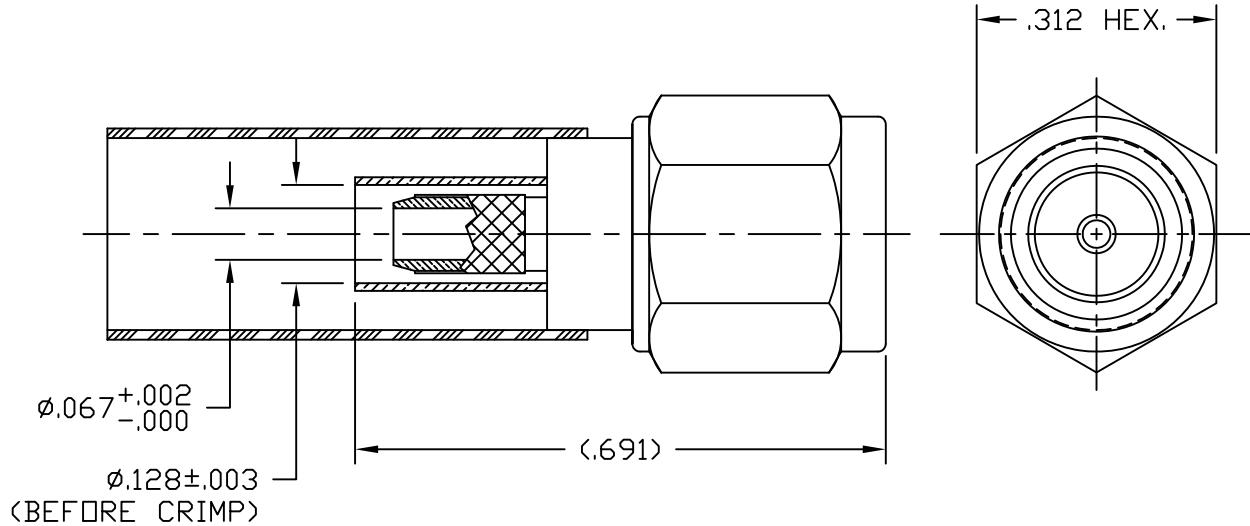


NOTICE OF PROPRIETARY RIGHTS THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA, INCLUDING TRADE SECRETS, PROPRIETARY TO TIMES MICROWAVE SYSTEMS. DISCLOSURE OF THIS DATA IS EXPRESSLY CONDITIONED UPON YOUR ASSENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY. ANY OTHER USE IS STRICTLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF TIMES MICROWAVE SYSTEMS.

| SYM | REVISION DESCRIPTION | DFTM | DATE | APPD | DATE |
|-----|-------------------------|----------|----------|----------|---------|
| - | RELEASED FOR PRODUCTION | J. C. L. | 8/20/03 | J. C. L. | 8/20/03 |
| A | CHANGED PER CDC #36704 | J. J. H. | 1/14/13 | J. D. B. | 1/15/13 |
| B | CHANGED PER CDC #37206 | J. D. B. | 3/226/13 | J. D. B. | 3/26/13 |



NOTES:

1. ASSEMBLED CONNECTOR INTERFACE IS DESIGNED IN ACCORDANCE WITH MIL-STD-348.
2. MATERIAL: BODY & HEX COUPLING NUT - CORROSION RESISTANT STEEL PER ASTM A582.
CONTACT - BERYLLIUM COPPER PER ASTM B196.
INSULATOR - TEFLON PER ASTM D1710
GASKET - SILICONE RUBBER PER ZZ-R-765
SHRINK SLEEVE - SHRINKABLE POLYOLEFIN PER MIL-I-23053/5
FERRULE - D.H.P. COPPER CDA ALLOY 122
3. FINISHES: BODY & HEX COUPLING NUT - PASSIVATE PER QQ-P-35
CONTACT - GOLD PLATE PER MIL-G-45204
FERRULE - SULFAMATE NICKEL PLATE
4. CONTACT PIN IS SOLDERED.
5. CRIMP THE FERRULE TO .128" HEX.

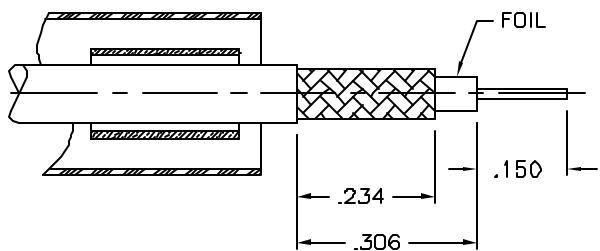
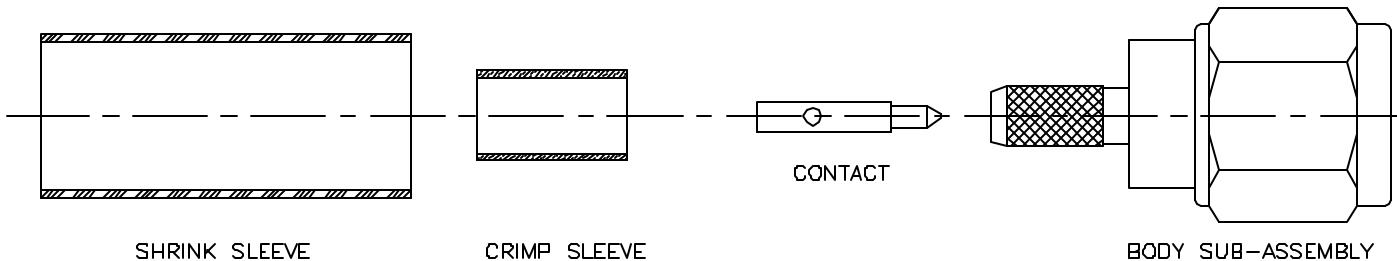
| | | | | | |
|------------|---|----------------------|------------------|----------------|------------------------------|
| MATERIAL | UNLESS OTHERWISE SPECIFIED | | DFTM, J. C. L. | DATE 8/20/03 | TIME'S MICROWAVE SYSTEMS |
| | ALL DIMENSIONS ARE IN INCHES MACHINED SURFACES FINISH N/A RMS MAX. REMOVE ALL BURRS .005 MAX. BREAK MACHINE CORNERS .005 MAX. FILLET R. TOLERANCES ON DECIMALS .XX ± .03 .XXX ± .005 ANGLES ± 1° FRACTIONS ± 1/32 | | | | |
| USED ON: A | CHKD, J. C. L. | DATE 8/20/03 | TC-100-SM | APPD, J. C. L. | SMA MALE FOR LMR100 CABLE |
| SCALE: N/A | DWG SIZE A | DO NOT SCALE DRAWING | CODE IDENT 68999 | DATE 8/20/03 | REV B |
| | | | SH | 1 of 1 | SD3190-1551 |



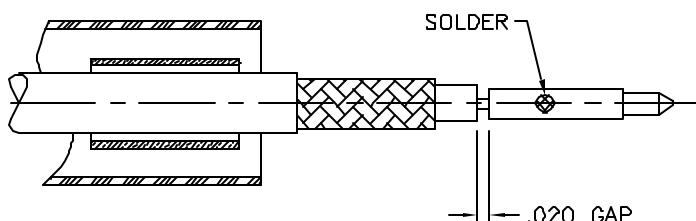
MICROWAVE SYSTEMS

358 Hall Avenue/P.O. Box 5039
Wallingford, CT 06492-5039
Tel: 203-949-8400
FAX: 203-949-8423
1-800-TMS-COAX
www.timesmicrowave.com

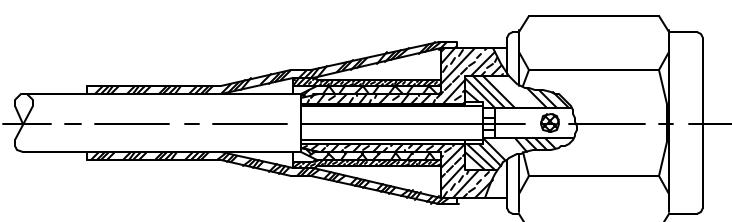
INSTALLATION INSTRUCTIONS
TC-100-SM (TIMES 3190-1551)
(Cable Types: LMR-100)



- 1) A. Trim cable to dimensions shown. Slide shrink sleeve & crimp sleeve back onto cable.
B. Remove any residual plastic from the center conductor and deburr center conductor using a fine file.



- 2) A. Slide contact onto center conductor leaving a .020 gap as shown and solder to center conductor. Use minimal heat to minimize melting of foam dielectric. Inspect to be sure aluminum foil is not touching center contact.



- 3) A. Insert cable into connector until fully seated, with all braid wires on the outside of connector body and aluminum tape inside connector body.
B. Slide crimp sleeve forward and crimp as close as possible to body using a .128" hex die. Use Times HX-4 crimp tool or equivalent. Do not crimp rear of crimp sleeve.
C. Heat shrink weather seal over rear of connector body and down onto cable jacket using hot air gun.

SMA Male Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch



RF Connectors Technical Data Sheet

PE4009

Configuration

- SMA Male Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch Interface Type
- Crimp/Solder Attachment
- 5/16 inch Hex

Features

- Max. Operating Frequency 3 GHz
- Good VSWR of 1.4:1
- Gold Plated Brass Contact
- 50 µin minimum contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE4009 SMA male right angle connector with crimp/solder attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100 and 0.100 inch is part of our full line of RF components available for same-day shipping. Our SMA male connector operates up to a maximum frequency of 3 GHz and offers good VSWR of 1.4:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SMA male right angle connector PE4009 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 | | | 1.4:1 | |
| Operating Voltage (AC) | | | 335 | Vrms |

Mechanical Specifications

| Size | |
|---------------|---------------------------------|
| Length | 0.756 in [19.2 mm] |
| Width/Dia. | 0.315 in [8.00 mm] |
| Height | 0.61 in [15.49 mm] |
| Weight | 0.013 lbs [5.9 g] |
| Mating Torque | 3 to 5 in-lbs [0.34 to 0.57 Nm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4009](#)

SMA Male Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch



RF Connectors Technical Data Sheet

PE4009

Material Specifications

| Description | Material | Plating |
|--------------|----------|--------------------------------|
| Contact | Brass | Gold 50 μ in minimum |
| Insulation | PTFE | |
| Body | Brass | Nickel 100 μ in minimum |
| Coupling Nut | Brass | Nickel 100 μ in minimum |
| Crimp Sleeve | Brass | Nickel |

Environmental Specifications

Temperature

Operating Range

-65 to +165 deg C

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

Plotted and Other Data

Notes:

SMA Male Right Angle 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% availability and are part of the broadest selection in the industry.

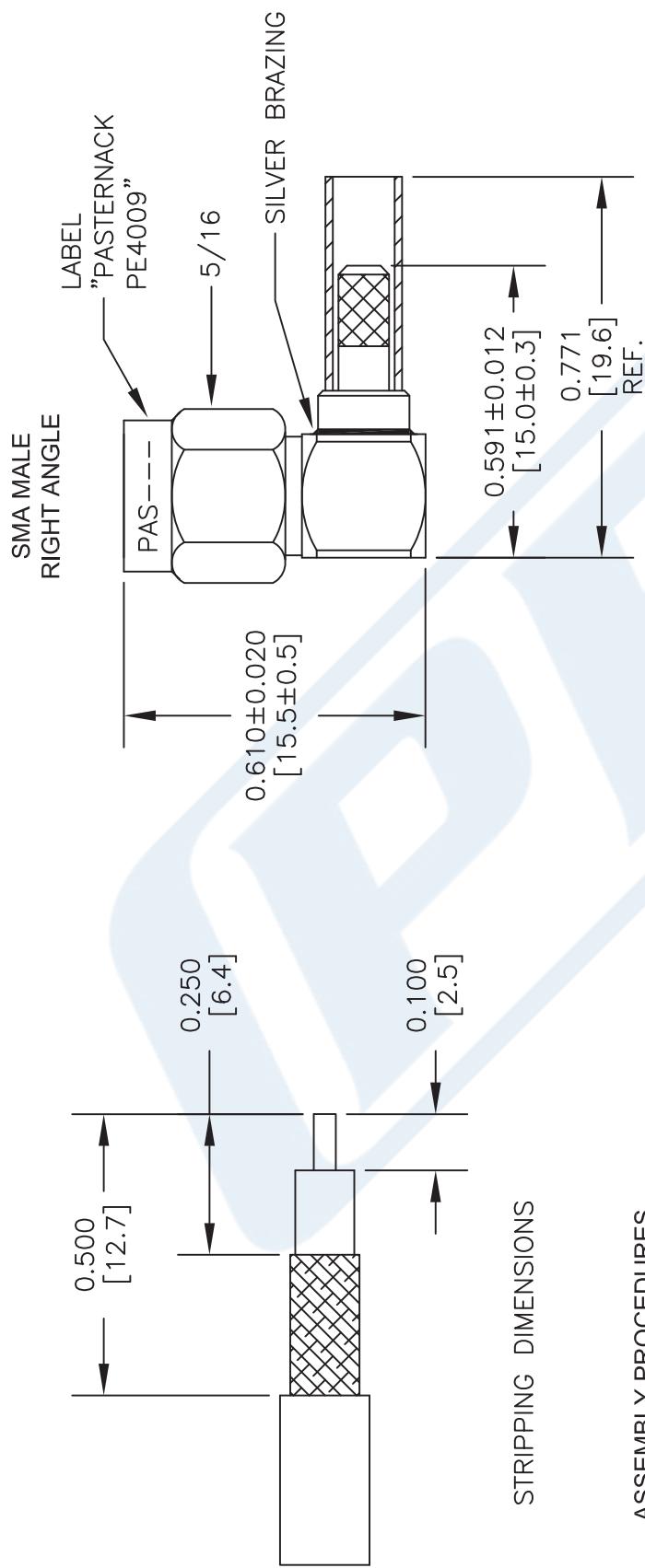
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Right Angle Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4009](#)

URL: <https://www.pasternack.com/sma-male-standard-rg316-rg174-rg188-connector-pe4009-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.

PE4009 CAD Drawing

SMA Male Right Angle Connector Crimp/Solder Attachment for RG174,
RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch



STANDARD TOLERANCES

| | |
|------|------------|
| .X | ± 0.2 |
| .XX | ± 0.1 |
| .XXX | ± 0.05 |

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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].

| DWG TITLE | PE4009 |
|-----------|--------|
| FSCM NO. | 53919 |

| SIZE A | 2233 |
|--------|------|
| REF. | |



Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623

Phone: (949) 261-1920 | Fax: (949) 261-7451
Website: www.pasternack.com | E-Mail: sales@pasternack.com

Flexible RG188 Coax Cable Single Shielded with White PTFE Jacket

TECHNICAL DATA SHEET

RG188A/U

Flexible RG188 Coax Cable Single Shielded with White PTFE Jacket

Configuration

| | |
|--------------------------------------|----------------------------|
| Inner Conductor Material and Plating | Copper Clad Steel, Silver |
| Dielectric Type | PTFE |
| Shield Materials | Silver Plated Copper Braid |
| Jacket Material and Color | PTFE, White |

Electrical Specifications

| | |
|---------------------------------------|-------|
| Impedance, Ohms | 50 |
| Dielectric Withstanding Voltage, Vrms | 2,000 |

Electrical Specifications by Frequency

Frequency 1

| | |
|---------------------------------|------------|
| Frequency, MHz | 400 |
| Attenuation, dB/100ft [dB/100m] | 20 [65.62] |

Mechanical Specifications

Temperature

Inner Conductor

| | |
|-------------------|-------------------|
| Number of Strands | 7 |
| Material | Copper Clad Steel |
| Plating | Silver |

0.02 [0.51]

Dielectric:

| | |
|-------------------|-------------|
| Type | PTFE |
| Diameter, in [mm] | 0.06 [1.52] |

Shield:

| | |
|-------------------|----------------------------|
| Number of | 1 |
| Material 1 | Silver Plated Copper Braid |
| Diameter, in [mm] | 0.081 [2.06] |

Jacket:

| | |
|-----------------------|--------------|
| Material | PTFE |
| Diameter, in [mm] | 0.11 [2.79] |
| Color | White |
| Weight, lbs/ft [Kg/m] | 0.011 [0.02] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG188 Coax Cable Single Shielded with White PTFE Jacket RG188A/U](#)

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.

Flexible RG188 Coax Cable Single Shielded with White PTFE Jacket

TECHNICAL DATA SHEET

RG188A/U

Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant

Yes

Plotted and Other Data

Notes:

Values at 25 °C, sea level

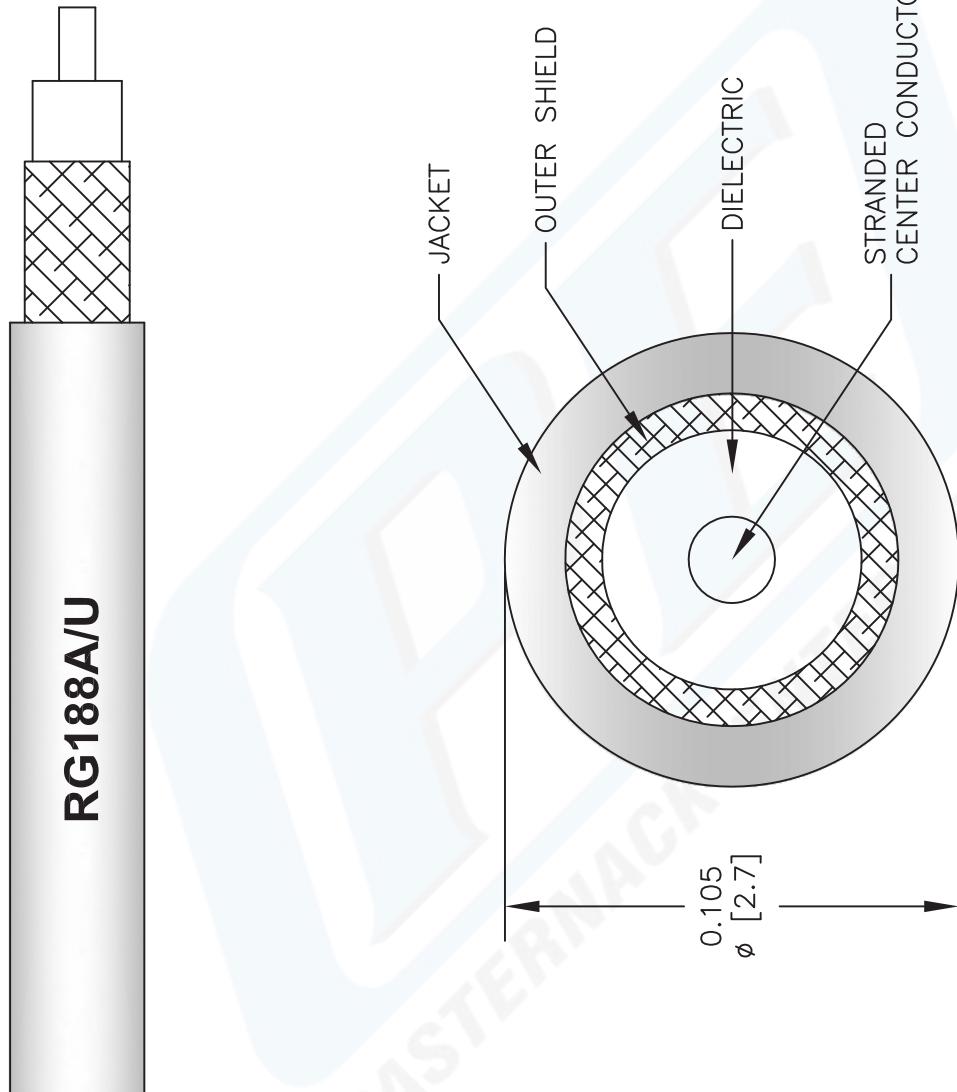
URL: <http://www.pasternack.com/flexible-0.110-rg188-50-ohm-coax-cable-ptfe-jacket-rg188a-u-p.aspx>

Flexible RG188 Coax Cable Single Shielded with White PTFE Jacket from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

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RG188A/U CAD Drawing

Flexible RG188 Coax Cable Single Shielded with White PTFE Jacket



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].

| PASTERNACK® | DWG TITLE | RG188A/U | | |
|---|-----------|----------|-------|-----|
| FSCM NO. | CAD FILE | 081512-C | SCALE | N/A |
| SIZE | A | 2233 | | |
| PASTERNACK Enterprises, Inc. P.O. Box 16759 Irvine CA 92623 Phone: (949) 261-1920 Fax: (949) 261-7451 Website: www.pasternack.com E-Mail: sales@pasternack.com | | | | |