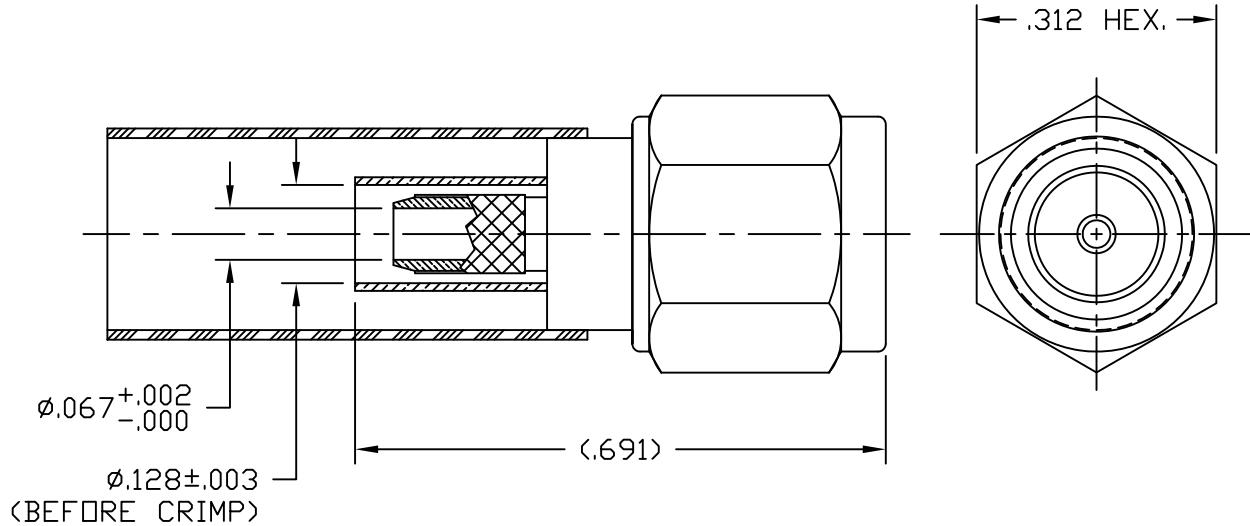


NOTICE OF PROPRIETARY RIGHTS THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA, INCLUDING TRADE SECRETS, PROPRIETARY TO TIMES MICROWAVE SYSTEMS. DISCLOSURE OF THIS DATA IS EXPRESSLY CONDITIONED UPON YOUR ASSENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY. ANY OTHER USE IS STRICTLY PROHIBITED 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.

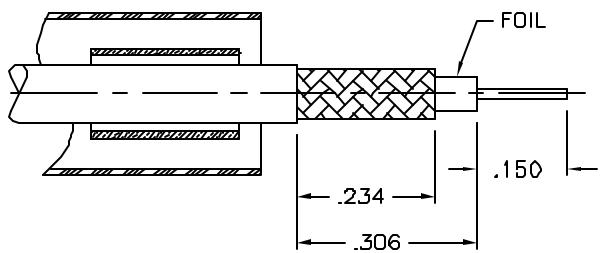
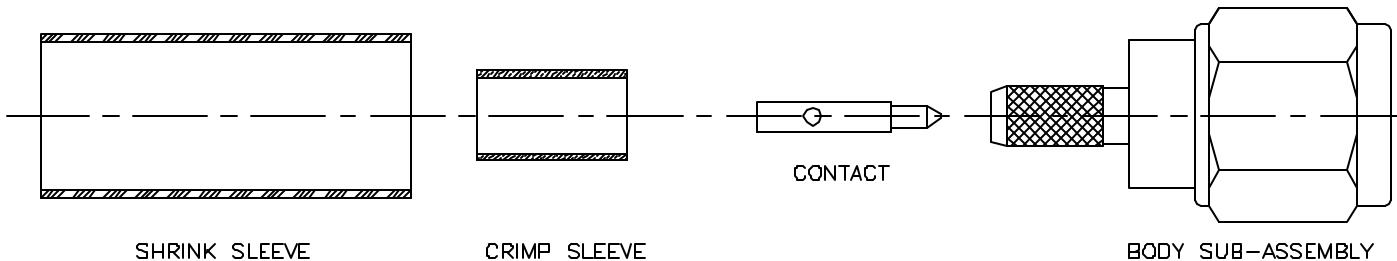
|            |   |                      |                  |                |                              |
|------------|---|----------------------|------------------|----------------|------------------------------|
| MATERIAL   | UNLESS OTHERWISE SPECIFIED  |                      | DFTM, J. C. L.   | DATE 8/20/03   | TIME'S MICROWAVE SYSTEMS     |
|            | ALL DIMENSIONS ARE IN INCHES<br>MACHINED SURFACES FINISH N/A RMS MAX.<br>REMOVE ALL BURRS .005 MAX. BREAK<br>MACHINE CORNERS .005 MAX. FILLET R.<br>TOLERANCES ON DECIMALS<br>.XX ± .03 .XXX ± .005<br>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<br>LMR100 CABLE |
| SCALE: N/A | DWG SIZE A  | DO NOT SCALE DRAWING | CODE IDENT 68999 | DATE 8/20/03   | REV B<br>1 of 1 SD3190-1551  |



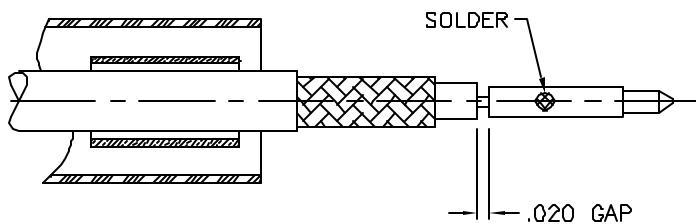
MICROWAVE SYSTEMS

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](http://www.timesmicrowave.com)

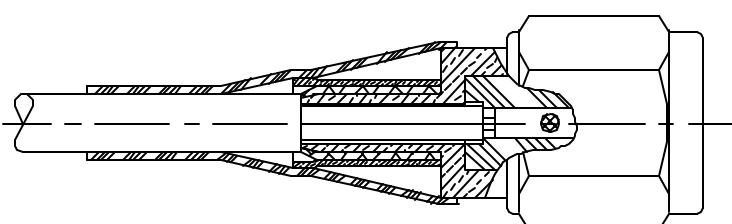
INSTALLATION INSTRUCTIONS  
TC-100-SM (TIMES 3190-1551)  
(Cable Types: LMR-100)



- 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 Female Connector Crimp/Solder Attachment for RG316, RG174, LMR-100

### RF Connectors Technical Data Sheet

PE45137

#### Configuration

- SMA Female Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- RG316, RG174, LMR-100 Interface Type
- Crimp/Solder Attachment

#### Electrical Specifications

| Description            | Minimum | Typical | Maximum | Units |
|------------------------|---------|---------|---------|-------|
| Frequency Range        | DC      |         | 6       | GHz   |
| VSWR                   |         |         | 1.3:1   |       |
| Operating Voltage (AC) |         |         | 335     | Vrms  |

#### Performance by Frequency

| Description     | F1      | F2 | F3 | F4 | F5 | Units |
|-----------------|---------|----|----|----|----|-------|
| Frequency Range | DC to 3 |    |    |    |    | GHz   |
| VSWR, Max       | 1.21:1  |    |    |    |    |       |

#### Mechanical Specifications

|            |                     |
|------------|---------------------|
| Size       |                     |
| Length     | 0.591 in [15.01 mm] |
| Width/Dia. | 0.25 in [6.35 mm]   |
| Weight     | 0.013 lbs [5.9 g]   |

#### Material Specifications

| Description     | Material         | Plating                      |
|-----------------|------------------|------------------------------|
| Contact         | Beryllium Copper | Gold<br>50 $\mu$ in. minimum |
| Insulation      | Teflon           |                              |
| Outer Conductor | Brass            | Gold<br>3 $\mu$ in. minimum  |
| Body            | Brass            | Gold<br>3 $\mu$ in. minimum  |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Connector Crimp/Solder Attachment for RG316, RG174, LMR-100 PE45137](#)



## SMA Female Connector Crimp/Solder Attachment for RG316, RG174, LMR-100

### RF Connectors Technical Data Sheet

PE45137

#### Environmental Specifications

##### Temperature

Operating Range

-65 to 165 deg C

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

RoHS Compliant

REACH Compliant

12/17/2014

#### Plotted and Other Data

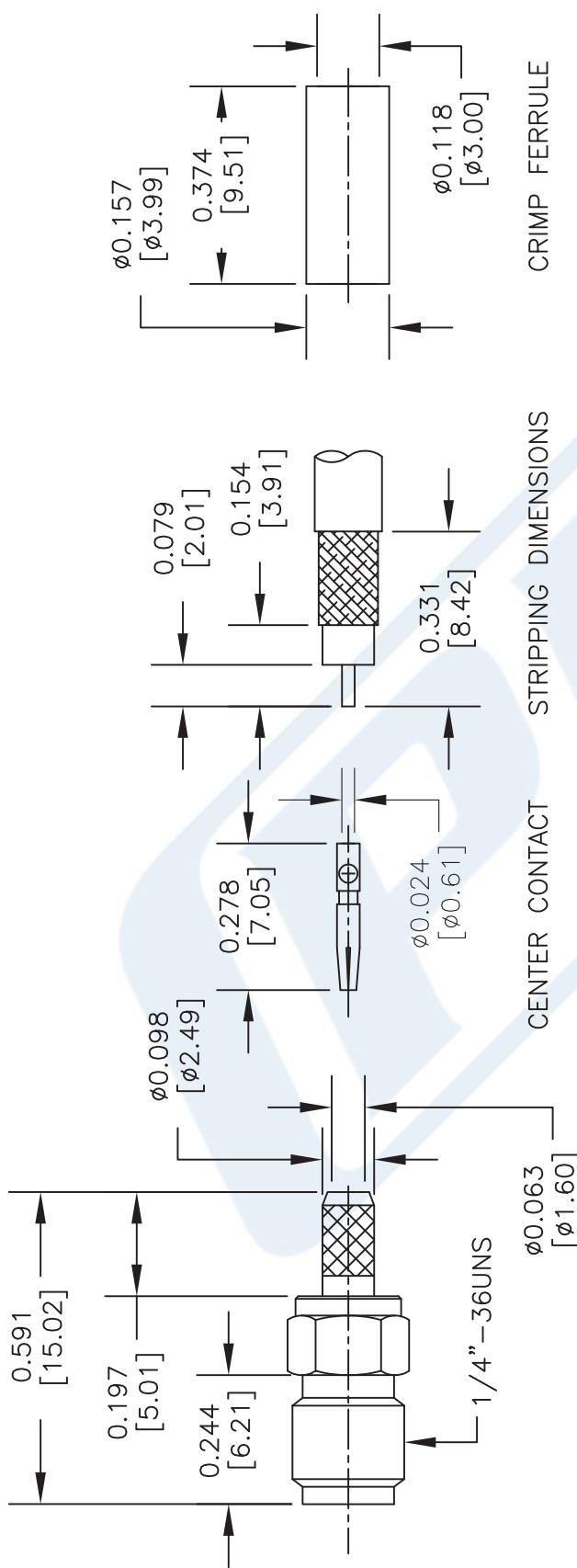
Notes:

SMA Female Connector Crimp/Solder Attachment for RG316, RG174, LMR-100 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 Female Connector Crimp/Solder Attachment for RG316, RG174, LMR-100 PE45137](http://www.pasternack.com/sma-female-rg316-rg174-lmr-100-connector-pe45137-pe45137.html)

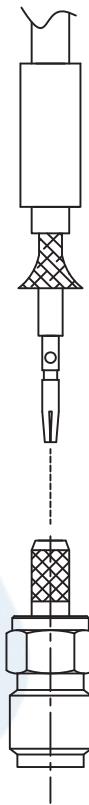
URL: <http://www.pasternack.com/sma-female-rg316-rg174-lmr-100-connector-pe45137-p.aspx>

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.



## ASSEMBLY PROCEDURES

1. STRIP CABLE TO THE DIMENSIONS SHOWN, DO NOT NICK CENTER CONDUCTOR OR BRAID.
2. SLIDE FERRULE ONTO CABLE.
3. PUSH CENTER CONDUCTOR FULLY INTO CONTACT AND SOLDER, REMOVE ANY EXCESS SOLDER.
4. FLARE BRAID AND INSERT CONTACT INTO THE BODY UNTIL IT SEATS.
5. SLIDE FERRULE OVER BRAID AND CRIMP WITH  $.138''$  [3.5] HEX. CRIMP TOOL.



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®<br>THE ENGINEER'S RF SOURCE | DWG TITLE<br><b>PE45137</b> | FSCM NO. 53919 | CAD FILE 021215 | SCALE N/A | SIZE A | 200 |
|---|-----------------------------|----------------|-----------------|-----------|--------|-----|
|---|-----------------------------|----------------|-----------------|-----------|--------|-----|

## Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket

### RF Cables Technical Data Sheet

#### Configuration

- Flexible Cable
- 1 Shield(s)

#### Electrical Specifications

| Description             | Minimum | Typical        | Maximum | Units        |
|-------------------------|---------|----------------|---------|--------------|
| Frequency Range         | DC      |                | 1,000   | MHz          |
| Impedance               |         | 50             |         | Ohms         |
| Velocity of Propagation |         | 66             |         | %            |
| Nominal Capacitance     |         | 31.08 [101.97] |         | pF/ft [pF/m] |

#### Performance by Frequency Band

| Description      | F1    | F2    | F3     | F4 | F5 | Units    |
|------------------|-------|-------|--------|----|----|----------|
| Frequency        | 100   | 400   | 1,000  |    |    | MHz      |
| Attenuation, Typ | 8.4   | 27.56 | 32     |    |    | dB/100ft |
|                  | 27.56 | 90.42 | 104.99 |    |    | dB/100m  |

#### Mechanical Specifications

|          |                          |
|----------|--------------------------|
| Diameter | 0.11 in [2.79 mm]        |
| Weight   | 0.009 lbs/ft [0.01 Kg/m] |

#### Construction Specifications

| Description     | Material and Plating         | Diameter           |
|-----------------|------------------------------|--------------------|
| Inner Conductor | Copper Clad Steel, 7 Strands | 0.019 in [0.48 mm] |
| Conductor Type  | Stranded                     |                    |
| Dielectric      | PE                           | 0.06 in [1.52 mm]  |
| First Shield    | Tinned Copper Braid          | 0.078 in [1.98 mm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket RG174A/U](#)

## Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket

### RF Cables Technical Data Sheet

**RG174A/U**

|        |            |                   |
|--------|------------|-------------------|
| Jacket | PVC, Black | 0.11 in [2.79 mm] |
|--------|------------|-------------------|

#### **Environmental Specifications**

##### **Temperature**

Operating Range

-40 to +80 deg C

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

#### **Plotted and Other Data**

Notes:

Flexible RG174 Coax Cable Single 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.

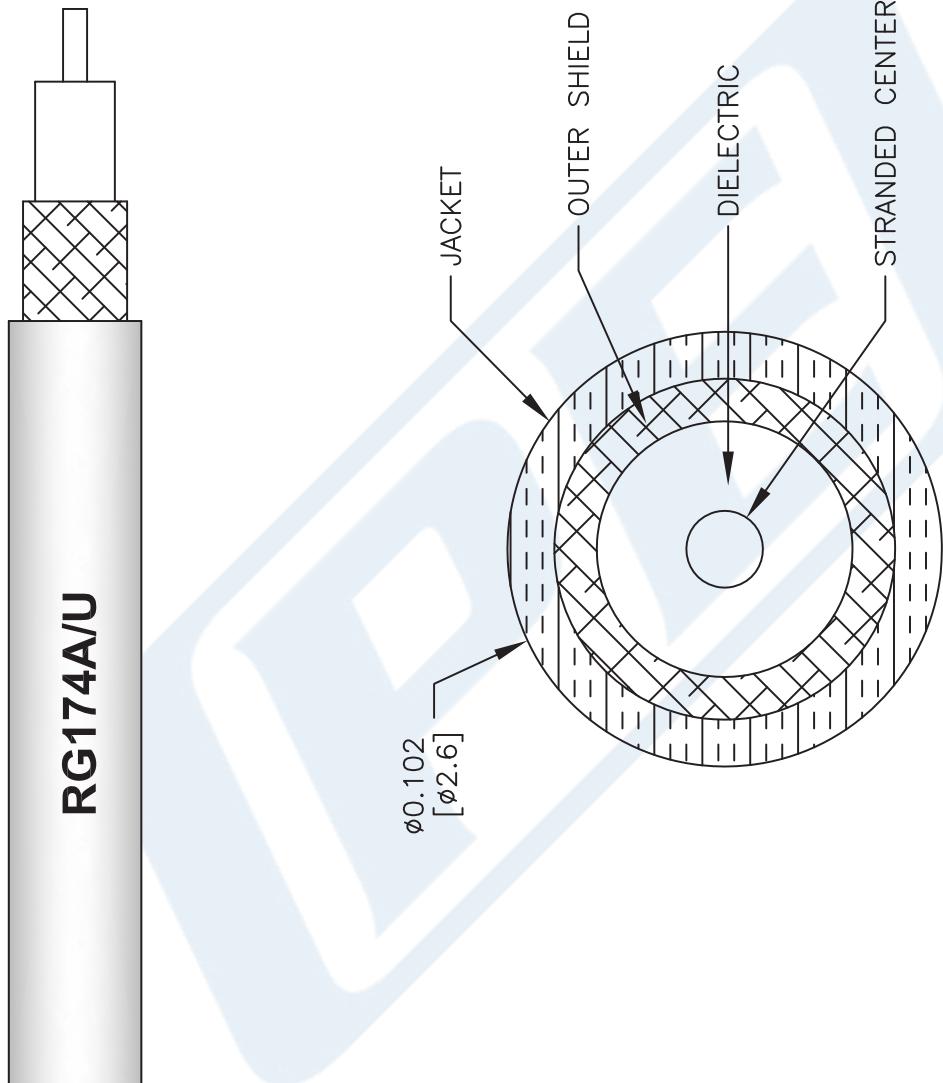
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket RG174A/U](#)

URL: <https://www.pasternack.com/flexible-0.100-rg174-50-ohm-coax-cable-pvc-jacket-rg174a-u-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.

# RG174A/U CAD Drawing

Flexible RG174 Coax Cable Single Shielded with Black PVC Jacket



NOTES:  
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2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE  
**RG174A/U**

|          |       |          |        |       |     |      |   |
|----------|-------|----------|--------|-------|-----|------|---|
| FSCM NO. | 53919 | CAD FILE | 111716 | SCALE | N/A | SIZE | A |
|----------|-------|----------|--------|-------|-----|------|---|

**PASTERNACK®**  
THE ENGINEER'S RF SOURCE  
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)