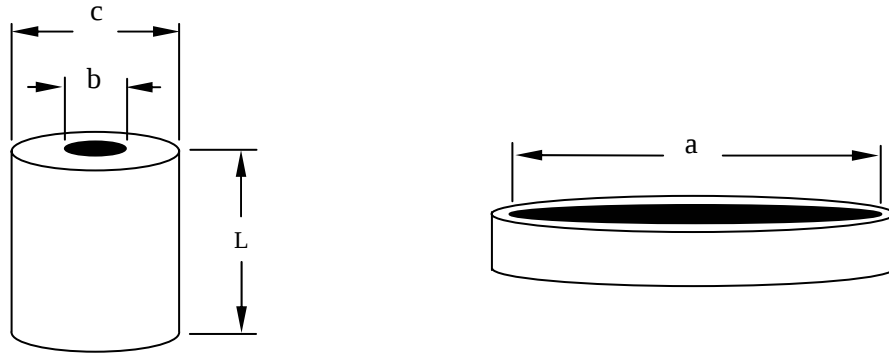


***shrinkHOoP***  
**Cable Clamp Heat Shrink Grommet Sizes 2, 3 and 4**



**Table of Dimensions, inch (mm):**

| Part Description | Inside Diameter |                | Outside Diameter Recovered (c), Ref | Overall Length Recovered L, Ref (See Note*) |
|------------------|-----------------|----------------|-------------------------------------|---------------------------------------------|
|                  | Min. Exp. (a)   | Max. Rec'd (b) |                                     |                                             |
| URHR-2           | 1.23 (31)       | 0.10 (2.5)     | 0.375 (9.5)                         | 0.50 (13)                                   |
| URHR-3           | 1.44 (37)       | 0.14 (3.5)     | 0.500 (12.7)                        | 0.50 (13)                                   |
| URHR-4           | 1.85 (47)       | 0.18 (4.6)     | 0.562 (14.2)                        | 0.75 (19)                                   |

**Note\*:** Alternate lengths available upon request.

**Material:** heat shrinkable, cross linked polyolefin, meets MIL-I-81765/1 Type II with Shore Hardness value 35+/- 5.

**Color:** Black

*shrinkHOoP* is a Trademark of Tyco Electronics

**Specification Control Drawing**

|                                                                                                                                                       |                     |                                                                                    |                       |                |                                                                                      |                  |                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------------------------------------------------------------------|-----------------------|----------------|--------------------------------------------------------------------------------------|------------------|--------------------------------|
| <b>tyco</b><br><i>Electronics</i>                                                                                                                     |                     | Tyco Electronics Corporation<br>300 Constitution Drive<br>Menlo Park, CA 94025 USA |                       | <b>Raychem</b> | Title:<br><b><i>shrinkHOoP</i> –Cable Clamp Heat Shrink Grommet Sizes 2, 3 and 4</b> |                  |                                |
| Tyco Electronics reserves the right to amend this drawing at any time.<br>Users should evaluate the suitability of the product for their application. |                     |                                                                                    |                       |                | Document No.<br><b>URHR-2-thru-4</b>                                                 |                  |                                |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.<br>METRIC DIMENSIONS ARE SHOWN IN BRACKETS                                                       |                     |                                                                                    |                       |                | Rev.:<br>F                                                                           |                  | Rev. Date:<br>December 9, 2004 |
| DRAWN BY:<br>U.NGUYEN                                                                                                                                 | CAGE CODE:<br>06090 | Org. Date:<br>10/03/2001                                                           | File name:<br>R040891 | SCALE:<br>None | SIZE:<br>A                                                                           | SHEET:<br>1 of 2 |                                |

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**Table 2: Properties**

|                                      | Property                                                 | Requirements                                                                                                                                                                   | Test method          |
|--------------------------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <b>Physical</b>                      | Tensile strength                                         | 1200 psi (8.3 Mpa) minimum                                                                                                                                                     | ASTM D-412           |
|                                      | Ultimate elongation                                      | 250% minimum                                                                                                                                                                   | ASTM D-412           |
|                                      | Specific gravity                                         | 1.4 maximum                                                                                                                                                                    | ASTM D-792           |
|                                      | Water absorption                                         | 0.5% maximum                                                                                                                                                                   | ASTM D-570           |
|                                      | Hardness, Shore D                                        | 35 ± 5                                                                                                                                                                         | ASTM D-2240          |
|                                      | Flammability                                             | Pass<br>Pass                                                                                                                                                                   | ASTM D-635<br>FAR-25 |
|                                      | Corrosion resistance                                     | Pass                                                                                                                                                                           | MIL-I-81765          |
|                                      | Low temperature flex<br>4 hours at -67 ± 2°F (-55 ± 1°C) | Pass                                                                                                                                                                           | MIL-I-81765          |
|                                      | Heat resistance<br>168 hours at 347 ± 2°F<br>(175 ± 1°C) | 200% ultimate elongation,<br>minimum<br>1000 psi (6.9 Mpa) tensile<br>strength, minimum                                                                                        | MIL-I-81765          |
|                                      | Heat shock<br>4 hours at 437 ± 5°F (225 ± 2°C)           | No cracking, dripping or flowing                                                                                                                                               | MIL-I-81765          |
|                                      | <b>Elastic Memory</b>                                    | 275% minimum expansion to 4 inch (10 cm) of a fully recovered test specimen, and 93% recovery of expanded specimen after oven condition for 1 minute at 302 ± 4°F (150 ± 2° C) |                      |
| <b>Electrical</b>                    | Dielectric strength                                      | 200 v/mil (7880 v/mm) minimum                                                                                                                                                  | ASTM D-149           |
|                                      | Volume resistivity                                       | 10 <sup>12</sup> ohm-cm minimum                                                                                                                                                | ASTM D-257           |
| <b>Chemical<br/>Fluid Resistance</b> |                                                          | 200% ultimate elongation,<br>minimum<br>750 psi (5.2 Mpa) tensile<br>strength, minimum                                                                                         | MIL-I-81765          |