



# High Definition BNC Connectors

**The Shadow™** is the trade name for the best high definition BNC connector available at any price. **The Shadow™** connectors fit all standard broadcast cables and utilize most standard existing tooling. These connectors are precision machined from brass. Insulator material is high density TFE to maintain a perfect dielectric constant. Bomar connectors feature a diameter gold plated contact pin to maintain the best return loss in high definition applications.

**The Shadow™** is precision machined (not cast) from brass. A special black nickel plating is applied to give it a beautiful finish that is easily identifiable as a high definition connector. Each connector is precision matched to a specific cable type. Uses standard commercial tooling.

| Part Number                                                         | Cable         | Hex Crimp          | Tool    |
|---------------------------------------------------------------------|---------------|--------------------|---------|
| HBC1505A                                                            | 1505A         | .255/.042*         | BDHD100 |
| HBC1694A                                                            | 1694A         | .324/.042*         | BDHD100 |
| HBC1694AX                                                           | 1694A         | .278/.042*         | BDHD100 |
| HBC1855A                                                            | 1855A         | .178/.042*         | BDHD200 |
| HBC179DT                                                            | 179DT         | .213 ferrule only* | BDHD200 |
| BD17900                                                             | 12 Point Tool | .042 (pin only)    |         |
| * We recommend 12 point tool for .042 pin Bomar BD17900 (See Below) |               |                    |         |
| Other cable sizes are available by special order.                   |               |                    |         |



BD17900 crimp tool for HD (.042 pin)

**In an independent test, The Shadow™ proved to have the best return loss results at 3GHz.**

| Freq in GHz | Return Loss (No Cable) | Return Loss (No Cable) | Return Loss (No Cable) | Return Loss (No Cable) | Return Loss (No Cable) |
|-------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|             | Bomar                  | K-Brand                | A-Brand                | AM-Brand               | T-Brand                |
| 2.0         | - 29.4 dB              | - 22.6 dB              | - 23.3 dB              | - 44.8 dB              | - 21.4 dB              |
| 2.6         | - 26.6 dB              | - 20.3 dB              | - 20.9 dB              | - 22.3 dB              | - 20.2 dB              |
| 3.0         | - 23.1 dB              | - 18.0 dB              | - 17.4 dB              | - 20.0 dB              | - 19.0 dB              |

Bomar P/N HBC1694A HP8648C, Slotted Connector Only Used for True Results.)

**Once cable is applied .**

