

## Heat-Shrinkable BNC/TNC Connectors 热缩BNC/TNC同轴连接器

单件设计, 一步焊接, 打造高频抗震连接  
Single-Piece Design. One-Step Solder. High-Frequency Reliability.

RF One Step 系列简化了同轴电缆的终端处理工艺。这款单件式组件专为 RG 系列及高性能航空电缆设计, 通过一次加热即可同步完成中心导体与屏蔽层的全焊接连接。该连接器可与 MIL-C-39012 标准接口完全互配, 提供 50Ω 与 75Ω 版本。相比传统的多部件组装接头, 它不仅安装速度极快, 更提供了卓越的线缆固持力和高达 2.8 GHz 的信号完整性, 彻底除了震动环境下的松脱风险。

The RF One Step series revolutionizes coaxial termination. These single-piece connectors enable simultaneous soldering of the center conductor and braid in a single heating cycle. Fully intermateable with MIL-C-39012 connectors, available in 50-ohm and 75-ohm versions. They offer superior cable retention force, vibration resistance, and signal integrity up to 2.8 GHz. By replacing complex multi-piece assemblies, they significantly reduce installation time and total installed cost.

### 系列概览

- 接口类型: BNC / TNC
- 阻抗选项: 50Ω / 75Ω
- 端子构型: 直式插头、弯式插头、面板安装插座。
- 尺寸规格: 提供大、中、小三种尺寸以适配不同线径。

### Series Overview

- Interface: BNC / TNC
- Impedance: 50Ω / 75Ω
- Styles: Straight Plug, Right-Angle Plug, Bulkhead/Panel Jack.
- Sizes: Available in Large, Medium, and Small to accommodate various cable diameters.

### 颜色 COLOR



### 特性与优势 Features and benefits

- 全焊接信号通路: 中心针与屏蔽层均为焊接连接, 确保极低的接触电阻与长期电气可靠性。
- 超强抗拉固持: 热缩封装与焊接结合, 提供高达 822N 的线缆保持力, 无惧高频插拔与剧烈震动。
- 一步法高效施工: 单件预装设计, 无需压接中心针, 降低了零件丢失风险与装配难度。
- 高频宽带兼容: 频率覆盖至 2.8 GHz, 适配标准 RG 电缆。
- 抗震环境密封: 内置带胶热缩套管, 固化后形成刚性保护, 提供优异的抗震加固与防潮密封。
- Full Solder Connection: Terminates both center conductor and braid with solder for minimal contact resistance and long-term reliability.
- Exceptional Cable Retention: Withstands high vibration and frequent mating/unmating (Retains up to 822N), outperforming standard crimps.
- One-Step Efficiency: Pre-assembled single-piece design simplifies installation, reducing labor time and component loss.
- High-Frequency Performance: Frequency coverage up to 2.8 GHz, compatible with standard RG cables.
- Vibration & Environmental Seal: Adhesive-lined tubing shrinks to provide robust mechanical reinforcement and protection against moisture.

### 产品特性 Product Characteristics

#### 材料规格 Material

中心触点 Center contact	镀金铍铜 (母端) Gold-plated beryllium copper (female)
	镀金黄铜 (公端) Gold-plated brass (male)
介电绝缘体 Dielectric insulator	PTFE
过渡件 Transition	镀银黄铜 Silver-plated brass
连接器主体 Connector body	镀镍黄铜 Nickel-plated brass
焊料 Solder	Sn63Pb37
编织屏蔽层 Braided shield	符合 ASTM B3 标准的镀锡铜线 Tin-plated copper wire per ASTM B3
绝缘套管 Insulation sleeve	辐照交联热缩聚偏氟乙烯 (PVDF), 透明蓝 Radiation-crosslinked, heat-shrinkable polyvinylidene fluoride, transparent blue
应力消除/密封套管 Strain relief/sealing sleeve	内衬胶辐照交联热缩改性聚烯烃, 黑色 Radiation-crosslinked, heat-shrinkable modified polyolefin with adhesive, black

#### 典型性能 Typical Performance

介电耐压 Dielectric withstand voltage	1500 V
绝缘电阻 Insulation resistance	5000 MΩ
额定温度 Temperature rating	-55°C to 150°C [-67°F to 302°F]
接触电阻 - 直式 Contact resistance - straight	内导体 = 1.5 mΩ, 外导体 = 1.0 mΩ Inner = 1.5 milliohms, outer = 1.0 milliohm
接触电阻 - 弯式/直角式 Contact resistance - right-angle	内导体 = 2.5 mΩ, 外导体 = 1.5 mΩ Inner = 2.5 milliohms, outer = 1.5 milliohms
电缆保持力 Cable retention force	295N (66 lb) to 822N (196 lb)
额定电压 Voltage rating	500 V RMS
连接器耐久性 Connector durability	至少 500 次插拔循环 500 mating cycles minimum

#### 电气性能 Electrical Performance

标称阻抗 Nominal impedance	50 Ω 和 75 Ω
频率范围 Frequency range	高达 2.8 GHz Up to 2.8 GHz

**表 A. BNC 产品规格**  
**Table A. BNC Product Dimensions**

阻抗 Impedance ( $\Omega$ )	RG 电缆 RG Cables	电缆尺寸 Cable Dimensions				产品编号 Part No.
		D (Min.— Max.)	E (Min.— Max.)	F (Min.— Max.)	G (Min.— Max.)	
<b>直式插头 (公针) Straight Plugs, Male Contacts</b>						
50	RG-174, RG-178, RG-188, RG-196, RG-316	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-01-BNC
50	RG-58, RG-141, RG-142, RG- 303, RG-400	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.00 [.118]	1.25 [.050]	SR150A-02-BNC
50	RG-165, RG-215, RG-213, RG-225, RG-214	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-03-BNC
75	RG-179, RG-187	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-04-BNC
75	—	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.70 [.146]	1.25 [.050]	SR150A-05-BNC
75	RG-6, RG-11, RG-12, RG-59, RG-144, RG-216	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-06-BNC
<b>弯式插头(公针) Right-Angle Plugs, Male Contacts</b>						
50	RG-174, RG-178, RG-188, RG-196, RG-316	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-11-BNC
50	RG-58, RG-141, RG-142, RG- 303, RG-400	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.00 [.118]	1.25 [.050]	SR150A-12-BNC
50	RG-165, RG-215, RG-213, RG-225, RG-214	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-13-BNC
75	RG-179, RG-187	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-14-BNC
75	—	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.70 [.146]	1.25 [.050]	SR150A-15-BNC
75	RG-6, RG-11, RG-12, RG-59, RG-144, RG-216	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-16-BNC
<b>直式穿墙插座 (母孔) Straight Bulkhead Jacks, Female Contacts</b>						
50	RG-174, RG-178, RG-188, RG-196, RG-316	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-21-BNC
50	RG-58, RG-141, RG-142, RG- 303, RG-400	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.00 [.118]	1.25 [.050]	SR150A-22-BNC
50	RG-165, RG-215, RG-213, RG-225, RG-214	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-23-BNC
75	RG-179, RG-187	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-24-BNC
75	—	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.70 [.146]	1.25 [.050]	SR150A-25-BNC
75	RG-6, RG-11, RG-12, RG-59, RG-144, RG-216	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-26-BNC

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直式插座 (母孔) Straight Jacks, Female Contacts						
50	RG-174, RG-178, RG-188, RG-196, RG-316	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-31-BNC
50	RG-58, RG-141, RG-142, RG- 303, RG-400	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.00 [.118]	1.25 [.050]	SR150A-32-BNC
50	RG-165, RG-215, RG-213, RG-225, RG-214	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-33-BNC
75	RG-179, RG-187	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-34-BNC
75	—	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.70 [.146]	1.25 [.050]	SR150A-35-BNC
75	RG-6, RG-11, RG-12, RG-59, RG-144, RG-216	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-36-BNC
直式面板插座 Straight Panel Jacks, Female Contacts						
50	RG-174, RG-178, RG-188, RG-196, RG-316	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-41-BNC
50	RG-58, RG-141, RG-142, RG- 303, RG-400	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.00 [.118]	1.25 [.050]	SR150A-42-BNC
50	RG-165, RG-215, RG-213, RG-225, RG-214	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-43-BNC
75	RG-179, RG-187	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-44-BNC
75	—	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.70 [.146]	1.25 [.050]	SR150A-45-BNC
75	RG-6, RG-11, RG-12, RG-59, RG-144, RG-216	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-46-BNC

**表 B. TNC 产品规格**  
**Table B. TNC Product Dimensions**

阻抗 Impedance ( $\Omega$ )	RG 电缆 RG Cables	电缆尺寸 Cable Dimensions				产品编号 Part No.
		D (Min.— Max.)	E (Min.— Max.)	F (Min.— Max.)	G (Min.— Max.)	
<b>直式插头 (公针) Straight Plugs, Male Contacts</b>						
50	RG-174, RG-178, RG-188, RG-196, RG-316	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-01-TNC
50	RG-58, RG-141, RG-142, RG- 303, RG-400	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.00 [.118]	1.25 [.050]	SR150A-02-TNC
50	RG-165, RG-215, RG-213, RG-225, RG-214	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-03-TNC
75	RG-179, RG-187	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-04-TNC
75	—	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.70 [.146]	1.25 [.050]	SR150A-05-TNC
75	RG-6, RG-11, RG-12, RG-59, RG-144, RG-216	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-06-TNC
<b>弯式插头(公针) Right-Angle Plugs, Male Contacts</b>						
50	RG-174, RG-178, RG-188, RG-196, RG-316	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-11-TNC
50	RG-58, RG-141, RG-142, RG- 303, RG-400	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.00 [.118]	1.25 [.050]	SR150A-12-TNC
50	RG-165, RG-215, RG-213, RG-225, RG-214	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-13-TNC
75	RG-179, RG-187	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-14-TNC
75	—	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.70 [.146]	1.25 [.050]	SR150A-15-TNC
75	RG-6, RG-11, RG-12, RG-59, RG-144, RG-216	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-16-TNC
<b>直式穿墙插座 (母孔) Straight Bulkhead Jacks, Female Contacts</b>						
50	RG-174, RG-178, RG-188, RG-196, RG-316	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-21-TNC
50	RG-58, RG-141, RG-142, RG- 303, RG-400	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.00 [.118]	1.25 [.050]	SR150A-22-TNC
50	RG-165, RG-215, RG-213, RG-225, RG-214	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-23-TNC
75	RG-179, RG-187	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-24-TNC
75	—	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.70 [.146]	1.25 [.050]	SR150A-25-TNC
75	RG-6, RG-11, RG-12, RG-59, RG-144, RG-216	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-26-TNC

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直式插座 (母孔) Straight Jacks, Female Contacts						
50	RG-174, RG-178, RG-188, RG-196, RG-316	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-31-TNC
50	RG-58, RG-141, RG-142, RG- 303, RG-400	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.00 [.118]	1.25 [.050]	SR150A-32-TNC
50	RG-165, RG-215, RG-213, RG-225, RG-214	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-33-TNC
75	RG-179, RG-187	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-34-TNC
75	—	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.70 [.146]	1.25 [.050]	SR150A-35-TNC
75	RG-6, RG-11, RG-12, RG-59, RG-144, RG-216	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-36-TNC
直式面板插座 Straight Panel Jacks, Female Contacts						
50	RG-174, RG-178, RG-188, RG-196, RG-316	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-41-TNC
50	RG-58, RG-141, RG-142, RG- 303, RG-400	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.00 [.118]	1.25 [.050]	SR150A-42-TNC
50	RG-165, RG-215, RG-213, RG-225, RG-214	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-43-TNC
75	RG-179, RG-187	1.50-5.50 [.060-.217]	0.90-3.00 [.035-.118]	1.55 [.060]	0.65 [.025]	SR150A-44-TNC
75	—	3.50-7.00 [.138-.276]	2.10-5.00 [.083-.197]	3.70 [.146]	1.25 [.050]	SR150A-45-TNC
75	RG-6, RG-11, RG-12, RG-59, RG-144, RG-216	5.00-12.50 [.197-.500]	4.10-9.50 [.161-.375]	7.30 [.287]	2.45 [.100]	SR150A-46-TNC

**产品对照表**  
**Product Comparison Table**

产品 Products	同行系列编号 Series in Other Company	鼎元系列编号 Series in Dingyuan
Heat-Shrinkable Crimp Splices 热缩压接端子	Heat-Shrinkable Crimp Butt Splices 热缩中接压接端子	D-406, SS HSC
	Heat-Shrinkable Crimp Terminals and Disconnects 热缩未接压接端子	D-106, KS108-316 HS125
	Transparent Heat-Shrinkable Crimp Splices 热缩高透明压接端子	D-406, SS, OS55 HSC-H
	MiniSeal High-Performance Crimp Splices 迷你密封高性能压接接头	D-436, H-CR-436 CA150
	Fixed connector for electrical wire 电线死接头	D-200 CA200
Heat-Shrinkable Solder Splices 热缩焊锡端子	General Solder Sleeve Wire Splices 通用焊锡端子	/ SST-SXR
	Solder Sleeve Wire Splices 焊锡接线端子	B-155-900X SST-R
		CWT-900X, B-150 SST-S
		B-155, E-C SW125B
		CWT, L-C SW125C
	Solder Sleeve Shield Terminals 屏蔽线焊锡端子	D-1744 SW150F
		D-110 SW150AP
		B-155, E-C SS125B
		CWT, L-C SS125C
		D-142, ST58, H-C, H-M, H-ML SS150A
		SO63, D-10x-00, H-C, H-M, H-ML SS150E
		S01/02/03, H-C, H-M, H-ML SS150F
	SO96, H-HC, H-HML, H-HMB SS175G	
	SO175, H-HC, H-HML, H-HMB SS175H	
	S200 SS200H	
High-Tensile Solder Sleeve Wire Splices 高抗拉焊锡端子	ELF5 SST-H	
Solder Sleeve Closed End Splices 焊锡末端封帽	SGRP SE125AP	
	SGRS SE125A	
Mini Solder Sleeve Discrete Wire Terminals 微型焊锡分立导线端子	SGRS-X-58 SE125B	
	B-155-150X SD125B	
	CWT-150X SD125C	
	D-129, D-141, D-71X SD150A	
	D-110 SW150AP	

<https://www.hzdingyuan.cn/>

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	产品 Products	同行系列编号 Series in Other Company	鼎元系列编号 Series in Dingyuan
Crimp & Solder Heat Shrinkable Splices 热缩压接&焊锡端子	Solder & Crimp Heat-Shrinkable Butt Connectors 压接焊锡中接端子	MLF5	STBT
	Solder Sealed Ring Terminals 焊锡密封环形端子	MLF110-116, ELF110-120	STBT
Cable Splices 电缆用端子	Solder Sleeve Shielded and Coaxial Cable Splices 屏蔽线同轴电缆焊锡中接端子	D-150	SA150A
	Solder Sleeve Coaxial Cable Terminals 同轴电缆焊锡未接端子	B-155-4XXX	SC125B
		CWT-4XXX, D-184	SC125C
		B-02X/B-04X, D-181	SC150A
	Solder Sleeve PCB/Coaxial Cable Terminals PCB同轴电缆焊锡未接端子	D-607, D-406	SP150A
Heat-Shrinkable BNC/TNC Connectors 热缩BNC/TNC同轴连接器	RBD, RTD	SR150A	