

# New and Improved SMA and Type-N Connectors Optimized for use with Low Loss Cables

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# Introduction

Amphenol RF is pleased to announce the release of a line of new SMA and Type-N connectors which are optimized for use with Low Loss cable.

- Connectors are performance-enhanced to take better advantage of the capabilities of low loss type cable.
- SMA and Type-N crimp designs are available in Straight Plugs, Right Angle Plugs, and Bulkhead Jacks for each cable type

# Low Loss Cable vs Flexible Cable

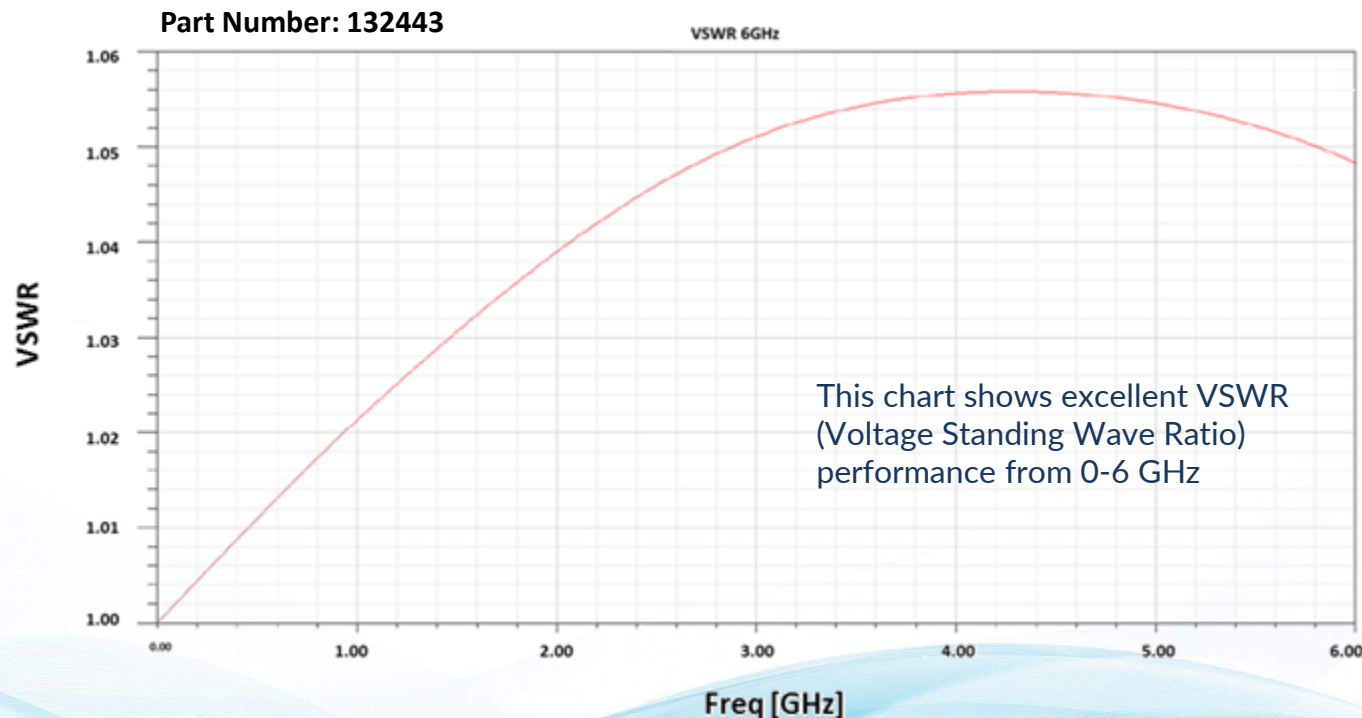
The term low loss refers to the cables relative low attenuation (loss) over distance. The most significant difference between standard flexible cable and low loss coaxial cable is the shielding. Low loss cable has far better shielding than typical flexible cable thus achieving better low loss characteristics. Additionally, low loss coaxial cables use solid center conductors which offer lower attenuation than stranded conductors that are sometimes found on flexible style cables.

**Popular Low Loss Cable Manufacturers/Part Numbers**

Belden	Times Microwave	Commscope
B7805	LMR-100	WBC-100
B7806A	LMR-195	WBC-195
B7807A	LMR-200	WBC-200
B7808A	LMR-240	WBC-240
B7809A	LMR-300	WBC-300
B7810A	LMR-400	WBC-400
B7976A	LMR-500	WBC-500
B7977A	LMR-600	WBC-600

# Why Choose These Over Existing Low Loss style Connectors?

- New design provides more reliable and consistent electrical performance at higher frequencies
- Improved grounding for more stable RF performance



# What has changed?

- Cohesively engineered, proprietary grounding features eliminate suck-out and ringing caused by poor grounding, improving electrical performance.
- The addition of a PTFE spacer eases assembly by eliminating the need to remove any of the bonded foil layer on the cable. These spacers have been incorporated into the RF line, which has been optimized to improve VSWR performance while eliminating the risk of shorts and hi-pot failures.

# Comparison of Existing Part Numbers to New Part Numbers

SMA Connectors	Cable Type	Existing Versions*	New, Optimized Versions
SMA Straight Crimp Plug	Low Loss 195	132113	132443
SMA Right Angle Crimp Plug	Low Loss 195	132122	132444
SMA Straight Crimp Plug	Low Loss 240	132231	132451
SMA Right Angle Crimp Plug	Low Loss 240	132239	132452
SMA Straight Bulkhead Jack	Low Loss 240	132241	132453
SMA Straight Bulkhead Jack	Low Loss 195	132118	132454

N-Type Connectors	Cable Type	Existing Versions*	New, Optimized Versions
N-Type Right Angle Crimp Plug	Low Loss 195	172177	172380
N-Type Straight Crimp Plug	Low Loss 195	172100	172381
N-Type Straight Bulkhead Jack	Low Loss 195	172106	172384
N-Type Right Angle Crimp Plug	Low Loss 240	172219	172385
N-Type Straight Bulkhead Jack	Low Loss 240	172149	172386
N-Type Straight Jack	Low Loss 240	172148	172394
N-Type Straight Crimp Plug	Low Loss 240	172135	172395

\*Note existing versions are still active, and are still suitable for use with both the RG and Low Loss cable types listed if desired

# Applications

- Telecommunications
- Wireless Systems
- Antennas
- Broadband Communications



# Resources

## Optimized SMA Connectors

	Straight Plug	Right Angle Plug	Bulkhead Jack
Low Loss 195	<a href="#"><u>132443</u></a>	<a href="#"><u>132444</u></a>	<a href="#"><u>132453</u></a>
Low Loss 240	<a href="#"><u>132451</u></a>	<a href="#"><u>132452</u></a>	<a href="#"><u>132453</u></a>



## Optimized N-Type Connectors

	Straight Plug	Right Angle Plug	Straight Jack	Bulkhead Jack
Low Loss 195	<a href="#"><u>172381</u></a>	<a href="#"><u>172380</u></a>		<a href="#"><u>172384</u></a>
Low Loss 240	<a href="#"><u>172395</u></a>	<a href="#"><u>172385</u></a>	<a href="#"><u>172394</u></a>	<a href="#"><u>172386</u></a>

