Description

Reverse polarity BNC, TNC, N & SMA connectors (RP-BNC, RP-TNC, RP-SMA) are designed for uses in wireless applications where a non-standard interface has been mandated by the FCC.

Applications

- Spread Spectrum Wireless Devices

Features

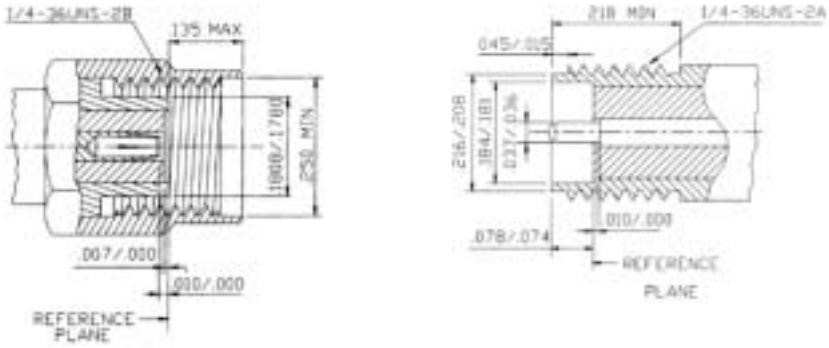
These connectors may also be used in applications where keying is a necessity. The RP BNCs, RP TNCs & RP SMAs meet the same high quality requirements as standard Amphonel BNCs, TNCs & SMAs. They provide excellent performance DC to 4 GHz for RP BNCs, DC to 4 GHz for RP TNCs and DC 18 GHz for RP-SMAs.

REVERSE POLARITY CONNECTORS(SMA,BNC,TNC)

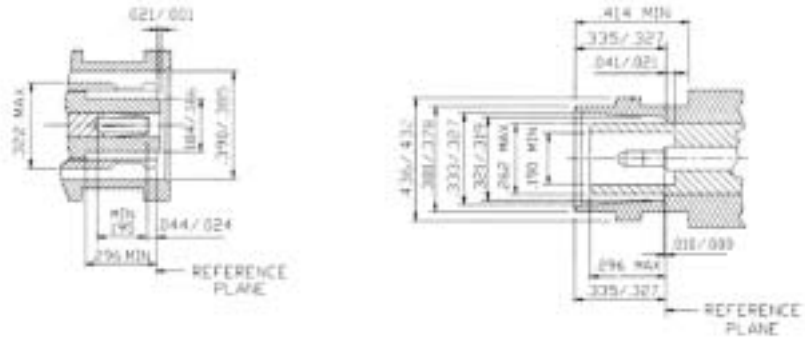
Reverse Polarity non-standard interface connectors are designed for spread spectrum wireless applications where Part 15 . 203 of U.S. FCC regulations are applicable. The reverse polarity design prevents damage and will not mate with standard interface devices if accidentally connected. SMA , BNC and TNC devices are readily available. Standard cable affixement sizes are available with special or custom design inquiries accepted.

Interface Dimensions

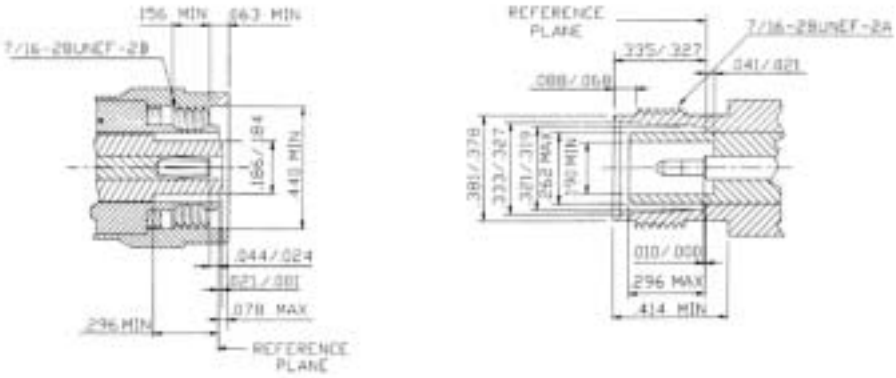
Reverse Polarity SMA



Reverse Polarity BNC



Reverse Polarity TNC



Notes:Unit of "Inch"

Reverse Polarity SMA:

Electrical:

Impedance	50 ohm	
Frequency Range	0 to 18.0 GHz • for RG-402 & RG-405 semi-rigid cable-0 to 18 GHz • for flexible cable→max operation frequency of cable per MIL-C-17	
VSWR	Semi-rigid Cable • 1.05+0.005 × f GHz max (straight) • 1.15+0.015 × f GHz max (right angle)	Flexible Cable • 1.15+0.01 × f GHz max (straight) • 1.18+0.02 × f GHz max (right angle)
Voltage Rating	375 volts rms	
Dielectric Withstanding Voltage	1000 volts rms	
Insertion Loss	.04 dB maximum × $\sqrt{f}$ GHz (straight);.06 dB maximum × $\sqrt{f}$ G Hz (right angle)	
Insulator Resistance	1000 Megohms min	

Mechanical & Environmental :

Mating	1/4" -36 threaded coupling
Durability	500 matings (for beryllium coupper female contact only)
Coupling Nut Retention	Min 60 lbs
Cable Retention	RG-58,141,142,223→40 lbs min ; RG-174,188,316→20 lbs min
Temperature Range	- 65℃ to 165℃

Material:

	Material	Plating
Connector Body	Brass	Nickel or Gold
Center Contact	Male: Brass ; Female: Beryllium Copper	Gold
Insulation	PTFE	None
Gasket	Silicone Rubber	None
Crimp Ferrule	Annealed Copper	Same as Bady

Reverse Polarity BNC,TNC:

Electrical:

Impedance	BNC:50 ohm	TNC:50 ohm
Frequency Range	BNC:0-4GHz	TNC:0-11GHz
VSWR	1.3 max (straight)	
Voltage Rating	500 volts rms max	
Dielectric Withstanding Voltage	1500 volts rms max	
Insertion Loss	.2 dB max@3GHz	
Insulator Resistance	5000 Megohms min	

Mechanical & Environmental :

Mating	BNC: Two stud bayonet coupling	TNC: 7/16"-28thread coupling
Durability	500 matings	
Coupling Nut Retention	100 lbs min	
Cable Retention	RG-58,141,142,223→40 lbs min; RG-59,62A,210→40 lbs min; RG-174,188,316→20lbs min	
Temperature Range	- 65℃ to 85℃	

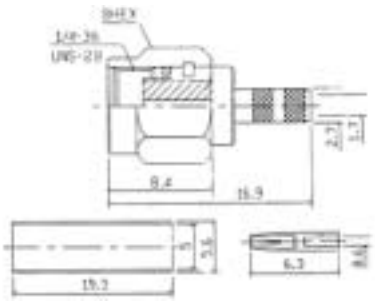
Material:

	Material	Plating
Connector Body	Brass	Nickel
Center Contact	Male: Brass ; Female: Brass or Phosphor Bronze	Glod
Insulation	PTFE	None
Gasket	Silicone Rubber,Rubber	None
Crimp Ferrule	Annealed Copper	Same as Bady

Note:Other Material/Finish is Available on Request.

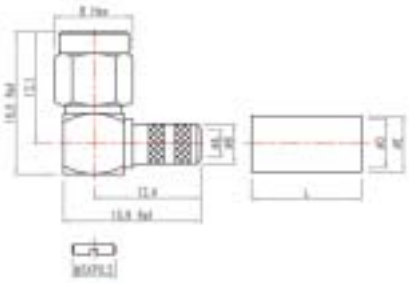
RP SMA Crimp Plug

Model No.	**RS101**
Cable	RG58/U,174/U,316/U
Remark	



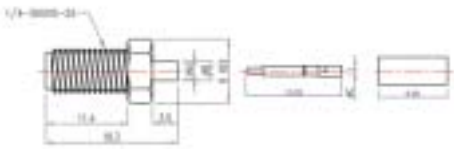
RP SMA R/A Crimp Plug

Model No.	**RS104**
Cable	RG58/U,174/U,316/U
Remark	



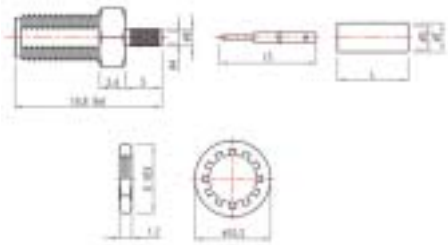
RP SMA Straight Crimp Jack

Model No.	**RS202**
Cable	RG58/U,174/U,316/U
Remark	



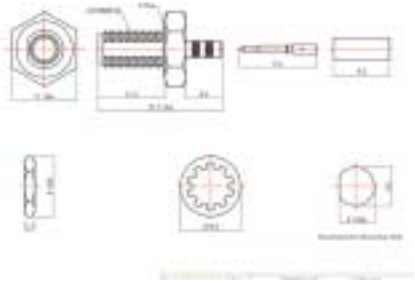
RP SMA Bulkhead Crimp Jack

Model No.	**RS204**
Cable	RG58/U,174/U,316/U
Remark	



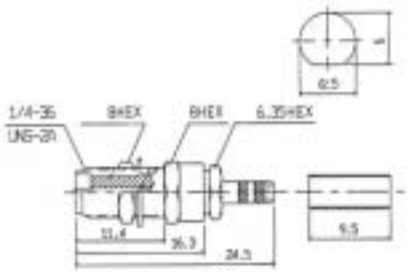
RP SMA Bulkhead Crimp Jack

Model No.	**RS212**
Cable	RG58/U,174/U,316/U
Remark	



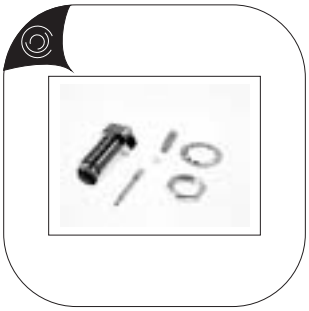
ReversePolarity Series(SMA)

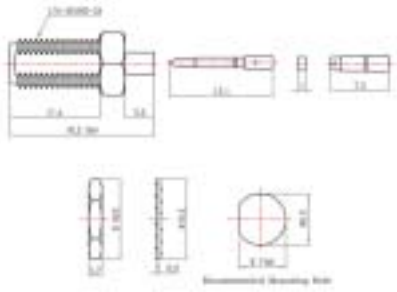
Crimp Termination for Flexible Cable



RP SMA Bulkhead Straight Crimp Jack

Model No.	**RS238**
Cable	RG58/U,174/U,316/U
Remark	





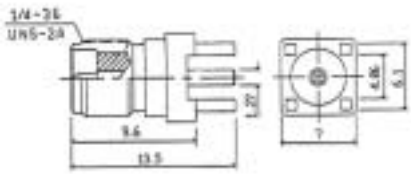
RP SMA Bulkhead Crimp Jack

Model No.	**RS268**
Cable	0.81, 1.13, 1.32
Remark	

ReversePolarity Series(SMA)

Printed Circuit Board, Straight or R/A Terminal

RP SMA

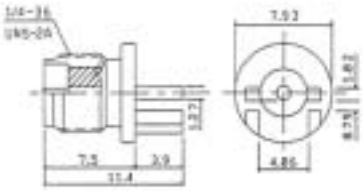


RP SMA Jack

Model No.	**RS211**
Cable	
Remark	Recommended PCB layout is
	available upon request

ReversePolarity Series(SMA,BNC,TNC)

Printed Circuit Board, Straight Terminal

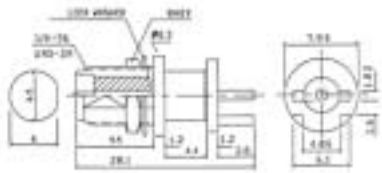


RP SMA Jack, Edge Card

Model No.	**RS246**
Cable	
Remark	Recommended PCB Soldering
	Pattern is available upon request

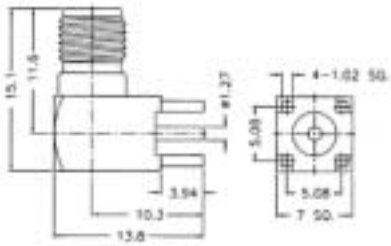
RP SMA Jack, Edge Card

Model No.	RS250
Cable	
Remark	Recommended PCB Soldering
	Pattern is available upon request



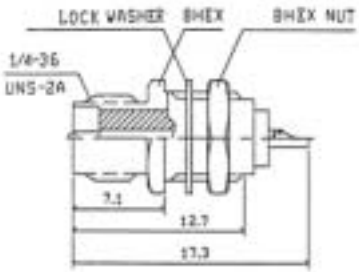
RP SMA R/A Jack

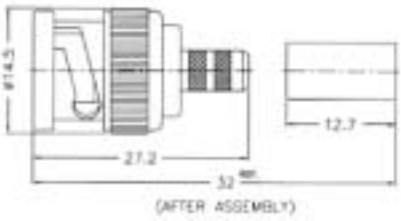
Model No.	RS209
Cable	
Remark	Recommended PCB layout is
	available upon request



RP SMA Bulkhead Jack

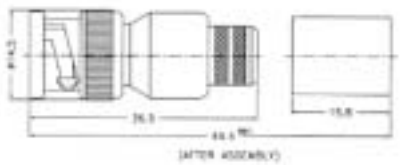
Model No.	RS223
Cable	
Remark	





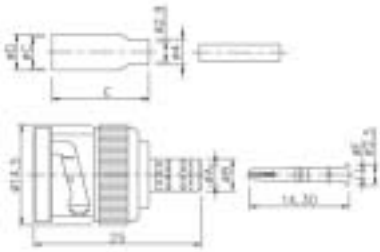
RP BNC Straight Crimp Plug

Model No.	**RB101**
Cable	RG58/U,59/U
Remark	



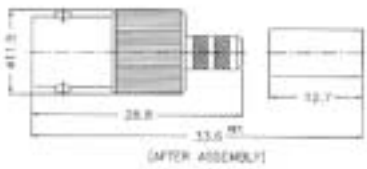
RP BNC Straight Crimp Plug

Model No.	**RB102**
Cable	RG213/U,9913/U
Remark	



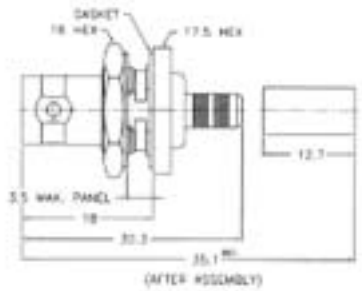
RP BNC Straight Crimp Plug

Model No.	**RB118**
Cable	RG174/U,316/U
Remark	



RP BNC Straight Crimp Jack

Model No.	**RB218**
Cable	RG58/U,59/U
Remark	

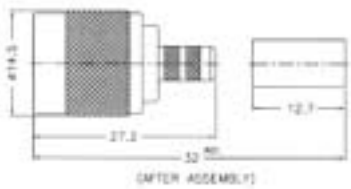


RP BNC Bulkhead Straight Crimp Jack

Model No.	**RB220**
Cable	RG58/U,59/U
Remark	

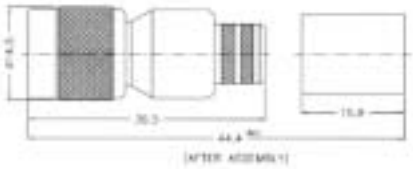
RP TNC Straight Crimp Plug

Model No.	**RT101**
Cable	RG58/U,59/U
Remark	



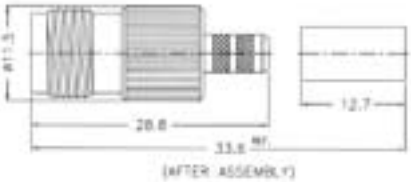
RP TNC Straight Crimp Plug

Model No.	**RT102**
Cable	RG213/U,9913/U
Remark	



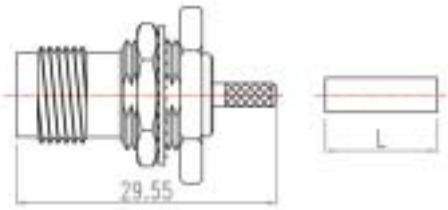
RP TNC Straight Crimp Jack

Model No.	**RT210**
Cable	RG58/U,59/U
Remark	



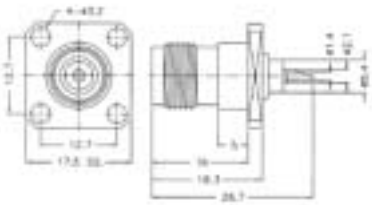
RP TNC Bulkhead Crimp Jack

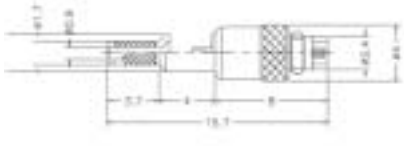
Model No.	**RT215**
Cable	RG58/U, 316/U
Remark	



RP TNC Jack Recptacle-4-Hole

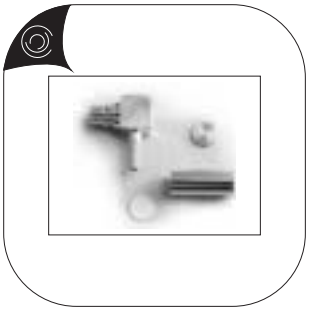
Model No.	**RT203**
Cable	
Remark	

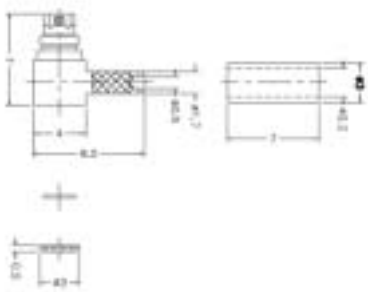




RP MMCX Straight Crimp Plug

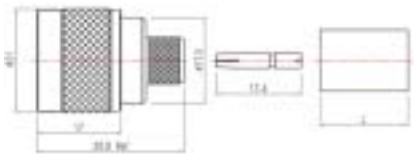
Model No.	RMM101
Cable	RG178
Remark	





RP MMCX R/A Crimp Plug

Model No.	RMM105
Cable	
Remark	



RP N Straight Crimp Plug

Model No.	RN102
Cable	
Remark	