



## **N Series Connectors**

- Medium sized connector for high-voltage applications
- Suited for critical applications and environments
- Performance to 11 GHz (commercial) and 18 GHz (hi frequency)
- Intermateable with MIL-C-39012, IEC 169-16 and CECC 22 210 connectors
- Applications in cellular & PCS base stations, telephony, broadcast, military and instrumentation
- Available in cable mounted, right-angle, bulkhead, panel mount and Adapter options
- Multiple terminations styles covering Crimp, Mil Clamp, Pressure Sleeve and Semi-rigid versions
- Order Catalog 1308830, "Greenpar RF Connectors"; Catalog 1654741 "Industrial & Commercial Products Machinery & Instrumentation" (AMP & Greenpar);
  Catalog 1307191, "RF Coaxial Solutions for Communications" (AMP only);
  1308940, "Products for Aerospace & Defense" (AMP military qualified)



### 7-16 Connectors

- For high power applications where a more rugged interface is required
- Performance to 7 GHz
- Cellular base station, antenna and broadcast applications
- Shells are machined brass
- Medium to high power, max. proof voltage 2.7kV
- Silver and White Bronze plating to reduce intermodulation ( > -160dBc can be achieved with certain cable configurations)
- Fully intermatable with connectors to CECC 22 190 and IEC 169-4
- Offering includes straight and right-angle plugs and jacks, panel and bulkhead jacks, crimp and solder contacts
- Order Catalog 1307191, "RF Coaxial Solutions for Communications"



## **Lightning and EMP Protection**

- Developed for cellular infrastructure, these connectors offer protection against high voltage pulses caused by lightning strikes
- Broadband performance dc to 3 GHz
- Available in ¼ wave stub tuners for equipment protection and surge arrestors for line protection
- Developed for GSM, DCS 1800, and PCS 1900 systems
- Standard interfaces are SMA, Type N, and 7-16 Series, which facilitates easy field retrofits
- Surge arrestors incorporate field replaceable Gas Discharge Tube (GDT) technology
- Low VSWR of < 1.2:1





## **BNC Connectors**

- Miniature connector series with bayonet style coupling mechanism
- Available in both 50 and 75 0hm versions
- Performance through 4 GHz
- Broadest overall offering of product in industry (cable applied, PCB, receptacles, adapters, military qualified [MIL-C-39012])
- Multiple terminations styles covering Crimp, Mil Clamp, Pressure Sleeve and Semi-rigid versions
- Thru-hole, compliant pin, press-fit and surface mount options
- Industry standard interface (commercial and military product)
- Bayonet lock coupling for reliable, quick connect/disconnect
- Applications include broadband, networking, signal management, video distribution (including HDTV), instrumentation, medical, transportation and military
- Low cost commercial and economy designs available through ZDC series
- Order Catalog 1308830, "Greenpar RF Connectors"; Catalog 1654741 "Industrial & Commercial Products - Machinery & Instrumentation" (AMP & Greenpar); Catalog 1307191, "RF Coaxial Solutions for Communications" (AMP only)



## Mini BNC Connectors

- Smaller version of the popular BNC series connector with same bayonet coupling mechanism and performance
- Performance through 2 GHz
- Same high performance currently found in standard BNC series, but offers 40% more interconnects in the same space
- Utilizes the same PCB footprint as standard BNC on the jack side, providing a drop-in replacement for DS3 telco applications
- Uses standard BNC industry tooling
- Ideal for telecommunications and broadband applications
- Order Flyer 1773041, "Mini BNC Connectors



## TNC Connectors

- Lightweight miniature connector operating between DC to 11GHz
- Machined body and contact with PTFE dielectric for high reliability
- Threaded coupling to ensure positive engagement in 50 & 75 ohm impedance
- Interface provides electrical continuity in vibration-intensive and shock application
- Fully intermateable with all standard TNC Plug, Jack, Bulkhead and Adapter styles
- Available in Nickel/Gold and Silver/Silver Plating Options
- Military qualified versions available
- Terminations types include Crimp, Solder Cup and Mil Clamp and Pressure Sleeve
- Applications include radar, medical, mil-aero & instrumentation
- Order Catalog 1308830, "Greenpar RF Connectors"; Catalog 1654741 "Industrial & Commercial Products - Machinery & Instrumentation" (AMP & Greenpar); Catalog 1307191, "RF Coaxial Solutions for Communications" (AMP only) 1308940, "Products for Aerospace & Defense" (AMP military qualified)

## Coaxial





## **UHF Connectors**

- Miniature non-constant impedance threaded connector series for applications up to 500 MHz
- Precision UHF coupling with interlocking serrations prevents accidental unmating
- Fully intermateable with all standard UHF Plug, Jack, Bulkhead and Adapter styles
- Available in Nickel/Gold and Silver/Silver Plating Options
- Terminations types include Crimp, Solder Cup and Solder Clamp
- Machined body and contact with PTFE dielectric for high reliability
- Applications include instrumentation, medical, military & instrumentation
- Order Catalog 1308830, "Greenpar RF Connectors"; Catalog 1654741 "Industrial & Commercial Products Machinery & Instrumentation" (AMP & Greenpar); Catalog 1307191, "RF Coaxial Solutions for Communications" (AMP only)



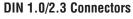
# **FME Connectors**

- Miniature 50 Ohm between series connector Adapter
- Threaded style coupling mechanism eliminates accidental disconnection
- Standardized coupling for a broad range of industry standard interfaces
- Frequency operation of up to 2GHz
- Standard series available as Plugs, Jacks, Inline Plugs, Bulkhead Plugs
- Adaptors available in many widely used Interface styles
- Nickel plated body; Gold contact & PTFE dielectric for multi-uses
- Applications include instrumentation, medical, test, military & telematics
- Order Catalog 1308830, "Greenpar RF Connectors"; Catalog 1654741 "Industrial & Commercial Products - Machinery & Instrumentation"



#### **MHV Connectors**

- Miniature High Voltage 50 ohm connector series
- BNC style bayonet coupling for fast connect / disconnect
- Extended dielectric for unmated electrical protection
- PTFE Dielectric provides wide operating range between -65°C to +165°C
- Frequency performance to 300 MHz at 1600 V
- Rated to 5 kV rms test voltage in mated condition
- Available as Straight Solder Clamp Plug and Bulkhead Socket
- Plating options include Nickel/Gold and Silver/Silver
- Applications include instrumentation, medical, test and military
- Order Catalog 1308830, "Greenpar RF Connectors"; Catalog 1654741 "Industrial & Commercial Products - Machinery & Instrumentation"





- Subminiature connector series for high density board-to-board and I/O connections on transmission, access, mobile and data communication equipment
- Performance through 2 GHZ (at 75 ohms) and 10 GHz (at 50 ohms)
- Available with standard threaded and slide-in coupling, and an innovative latching (quick lock) coupling mechanism which allows for quick and high density applications (8mm pitch)
- Meets IEC 169-29, DIN 47275 and CECC 22 230 interface and performance specifications
- Full crimp cable termination
- Adapters available to DIN series 1.6/5.6
- Order Catalog 1307191, "RF Coaxial Solutions for Communications"



## DIN 1.6/5.6 Connectors

- High performance version of DIN 1.0/2.3 connector series
- Suitable for transmission of high bit rates
- 75 ohm connector series with impedance matched performance through 8 GHz
- Commercial versions meet IEC 169-13 and CECC 22 240 interface and performance specifications
- Reliable and cost-effective IDC cable termination
- Screw, snap-on, slide-in and latching (quick lock) coupling available
- Adapters to Series 1.0/2.3 and BNC (both 75 ohm)
- Order Catalog 1307191, "RF Coaxial Solutions for Communications"



#### SMA Connectors

- Subminiature connector with threaded coupling mechanism designed for frequency applications of DC to 18 GHz
- Commercial versions meet the electrical and mechanical requirements of MIL-C-39012
- Military qualified versions (MIL-C-39012) are available
- Available in stainless steel, brass and zinc die-cast materials
- Flexible cable performance 6 GHz for brass, 12.4 GHz for stainless and 18 GHz for semi-rigid cable
- Plating options include Gold, Passivated, Nickel and White Bronze for corrosion resistant, non-magnetic plating & low intermodulation needs
- Termination options include Crimp, Solder Clamp, Mil Crimp and Direct Solder
- Uses industry standard crimp tools and processes
- Order Catalog 1308830, "Greenpar RF Connectors"; Catalog 1654741 "Industrial & Commercial Products - Machinery & Instrumentation" (AMP & Greenpar); Catalog 1307191, "RF Coaxial Solutions for Communications" (AMP only); 1308940, "Products for Aerospace & Defense" (AMP military qualified)





## **QMA Connectors**

- Snap-on version of the SMA connector series eliminates the threaded coupling and significantly reduces assembly time
- Same performance as standard SMA through 6 GHz
- No coupling nut required. Positive snap-on interface facilitates quick assembly and provides for denser packaging
- Intermateable with competitive product
- Retention force of mated pair is 60 N minimum
- Broad range of standard configurations including PCB, panel mount, flex and semi-rigid cable, and adapters
- Ideal for communication and industrial applications
- Order Flyer 1654881, "QMA Connectors"



## **SMB and Type 43 Connectors**

- Subminiature SMB series offers snap-fit coupling mechanism for quick connect/disconnect capability
- Smaller alternative to SMA
- Available in Cable, Bulkhead and PCB styles, frequency DC to 4 GHz
- Both 50 Ohm and 75 Ohm versions available in standard outline
- Optional tape & reel packaging for auto SMD placement
- Applications include GPS, telephony, CATV, control & instrumentation
- Low cost assembly using crimp center contact
- Type 43 (75 Ohm SMB) offers a positive lock interface to a standard 75 Ohm jack
- Order Catalog 1308830, "Greenpar RF Connectors"; Catalog 1654741 "Industrial & Commercial Products Machinery & Instrumentation" (AMP & Greenpar); Catalog 1307191, "RF Coaxial Solutions for Communications" (AMP only)



## **Switching Connectors**

- Mobile phone connector which provides signal switching function between internal phone antenna and external car antenna
- System used for mating the hand set into the cradle of the car kit for hands-free operation
- Performance to 2.4 GHz
- Compact surface mount switch offered in three main sizes: 3.5, 4.5, and 6 mm high
- Excellent signal transmission due to short distance between power elements and antenna or switch, no internal cables
- Floating system of mated pairs are able to compensate for tolerances of +/- 1mm radial and 0.6 mm axial
- Smaller connectors that utilize MID technology for testing applications up to 6 GHz are available





## **SMC Connectors**

- Sub-miniature 50 ohm light weight connector series
- Precision threaded coupling provides improved electrical performance and reduces accidental disconnection
- Standardized coupling conforms to the interface dimensions of MIL-STD-348 for SMC
- Provides intermateability with other connector suppliers up to 10GHz operation
- Available as Plug, Jack, Bulkhead, Adaptors
- Terminations options include Crimp, Solder Clamp and PCB Styles
- Precision machined gold plated body and contact with PTFE dielectric
- Applications include instrumentation, medical, military & instrumentation
- Order Catalog 1308830, "Greenpar RF Connectors"; Catalog 1654741 "Industrial & Commercial Products - Machinery & Instrumentation"



## **MCX Connectors**

- Snap on subminiature connector series conforming to IEC 60169-36 & CECC 22220 specifications
- Lightweight micro-miniature connector operating between DC to 6 GHz
- Offers 30% space saving reduction over SMB / SMC connectors types
- Applications in GPS, automotive, wireless communications & Instrumentation
- Available in a variety of mounting styles and cable options
- Brass and zinc die-cast bodies, gold and nickel plating available
- Order Catalog 1308830, "Greenpar RF Connectors", Catalog 1654741 "Industrial & Commercial Products - Machinery & Instrumentation"



# **MMCX Connectors**

- 35% smaller than MCX, this connector series is used in board-to-board and cable-to-board applications where space is a driving issue
- Excellent performance to 6 GHz
- PCB through-hole, surface mount, edge launch, flexible and semi-rigid cable designs
- Tape and reel packaging for high volume assembly
- Non-slotted outer contact provides for minimal RF leakage
- Meets interface requirements of CECC 22 340
- Offers one of the smallest conventional crimp terminations without special tooling
- Order Flyer 1654729, "AMP MMCX Connectors", Catalog 1308830 "Greenpar RF Connectors", Catalog 1654741 "Industrial & Commercial Products - Machinery & Instrumentation"





# **OSP and OSSP Connectors**

- Miniature modular blindmate series with interface for multiple interconnects.
- Performance to 22 GHz (OSP) and 28 GHZ (OSSP)
- Module-to-module and module-to-motherboard rigid mount applications; rack and panel, and module-to-motherboard float mount applications
- Space saving designs for multiple mate applications: .325" min. between connectors recommended for rigid mount, and .510" min. recommended for float mount
- Axial misalignment from .060" min., and radial from +/- .020" on float mounts and +/- .004" on rigid mounts
- No special application tooling required; industry standard
- Order Catalog 1307191, "RF Coaxial Solutions for Communications"



## **Board-to-Board Blindmate Connectors**

- Small board-to-board, blindmateable interconnect used where space and cost are driving issues
- Modular board-to-board (mother/daughtercard) blindmate product for base station, cellular handset, and wireless communications systems
- Low profile, one-piece construction available in three sizes for varied board spacing: 14mm, 10mm, and 6.65mm
- Large radial (+0.8mm) and axial (+1.0mm) misalignment
- No mating connector means low applied material and assembly costs
- Surface mount design for standard pick and place compatibility
- Excellent performance up to 4 GHz



### **OSMP Connectors**

- Performs to 40 GHz
- Small form factor
- Push-on style, blind mate
- Conforms to MIL-STD 348, in compliance with DSCC 94007 and 94008
- Order Catalog 1308940, "Products for Aerospace & Defense"



### **SSMA Connectors**

- Smaller version of SMA for reduced packaging requirements
- SSMA series allows operation to 38.0 GHz
- For Flexible cable or semi-rigid coax cable
- Order Catalog 1308940, "Products for Aerospace & Defense"