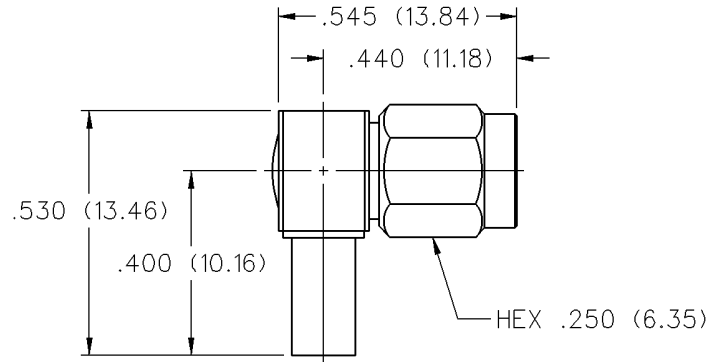
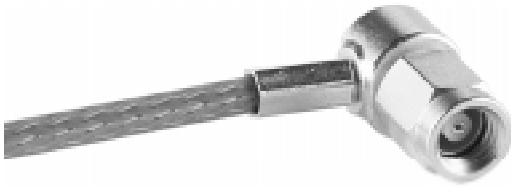


# 50 Ohm SMC Right Angle Crimp Type Plug - Captivated Contact

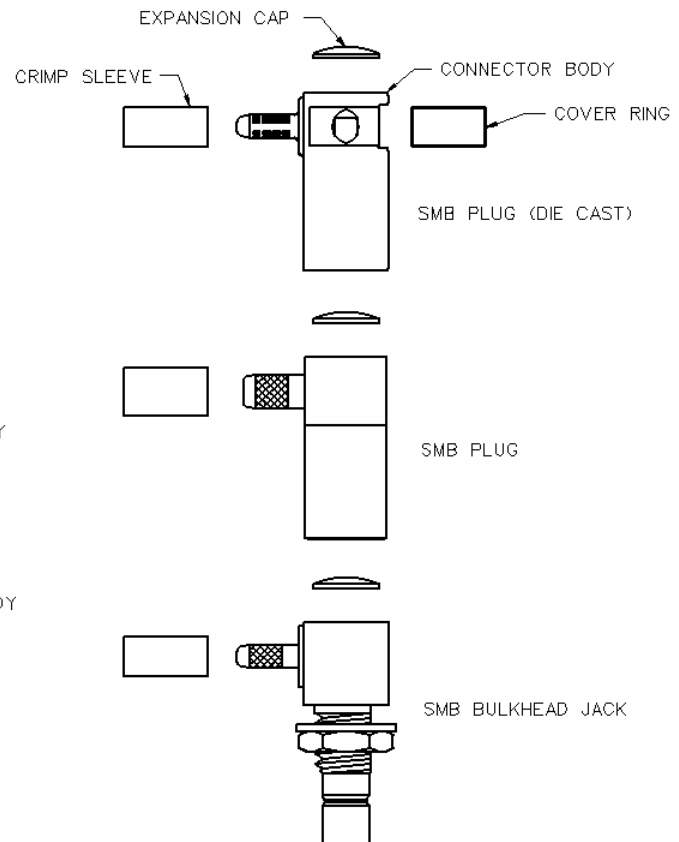
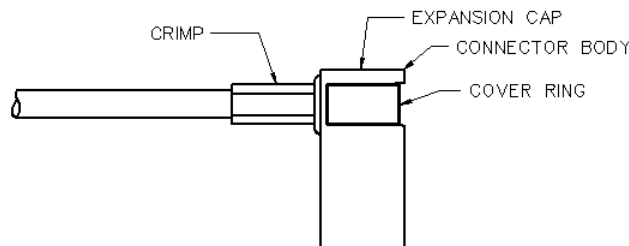
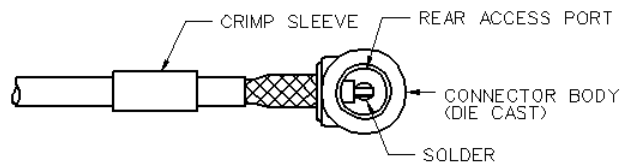
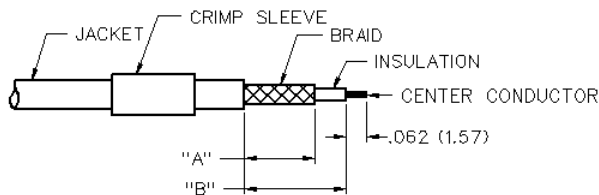


INCHES (MILLIMETERS)  
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST



| CABLE TYPE        | GOLD PLATED  | NICKEL PLATED |
|-------------------|--------------|---------------|
| RG-316 DS, 188 DS | 131-6404-101 | 131-6404-106  |

| CABLE GROUP  | PART NUMBER      | "A"         | "B"         | CRIMP HEX   |
|--------------|------------------|-------------|-------------|-------------|
| 316DS, 188DS | 131-6404-101/106 | .219 (5.56) | .312 (7.92) | .128 (3.25) |



1. Identify connector parts. (4 piece parts: crimp sleeve, body assembly, expansion cap and covering ring. Die cast body only.)
2. Strip cable to dimensions shown. Do not nick braid or center conductor. A wire stripper of correct size is recommended for this step. Twist stranded center conductor into tight bundle and tin (optional). Slide crimp sleeve onto cable as shown.
3. Flare braid and slide cable into body assembly making certain that the cable insulation bottoms on center contact. Solder center conductor to contact through the rear and side access ports. Use a minimum amount of solder for a good joint. **.020 (0.51) diameter solder is recommended.**
4. Arrange braid uniformly around crimp stem of body assembly. Slide crimp sleeve over braid and crimp securely using recommended crimp tool. Place expansion cap in access port and seat with a .125 (3.17) diameter flat punch. Snap cover ring over side access port.

# SMC - 50 Ohm Connectors

## Specifications



INCHES (MILLIMETERS)  
CUSTOMER DRAWINGS AVAILABLE UPON REQUEST

### ELECTRICAL RATINGS

**Impedance:** 50 ohms

**Frequency Range:** 0-10 GHz

**VSWR:** (f = GHz)

RG-178 cable ..... Straight Cabled ..... Right Angle Cabled

RG-316 and .086 semi-rigid ..... 1.25 + .04f ..... 1.40 + .06f

cable ..... 1.20 + .04f ..... 1.30 + .04f

Uncabled receptacles ..... N/A

Adapters ..... 1.20 + .04f

**Working Voltage:** (Vrms maximum)†

Connectors for Cable Type ..... Sea Level ..... 70K Feet

RG-178 ..... 250 ..... 60

RG-316, .086 semi-rigid ..... 335 ..... 85

uncabled receptacles, adapters ..... 335 ..... 85

**Dielectric Withstanding Voltage:** (VRMS minimum at sea level)†

Connectors for RG-178 ..... 750

Connectors for RG-316, .086 semi-rigid ..... 1000

uncabled receptacles, adapters ..... 1000

**Corona Level:** (Volts minimum at 70,000 feet)†

Connectors for RG-178 ..... 185

Connectors for RG-316, .086 semi-rigid ..... 250

Uncabled receptacles and adapters ..... N/A

**Insertion Loss:** (dB maximum, tested at 4 GHz)

Straight cable connectors ..... 0.25 dB

Right angle cable connectors ..... 0.50 dB

Uncabled receptacles and adapters ..... N/A

**Insulation Resistance:** 1000 megohms minimum

**Contact Resistance:** (milliohms maximum)

Initial ..... After Environmental

Center contact (straight cabled ..... 6.0 ..... 8.0

connectors and uncabled receptacles) ..... 6.0 ..... 8.0

Center contact (right angle cabled ..... 12.0 ..... 16.0

connectors and adapters) ..... 12.0 ..... 16.0

Outer contact (gold plated connectors) ..... 1.0 ..... N/A

Outer contact (nickel plated connectors) ..... 2.5 ..... N/A

Braid to body (gold plated connectors) ..... 1.0 ..... N/A

Braid to body (nickel plated connectors) ..... 2.5 ..... N/A

**RF Leakage:** (dB minimum tested at 2.5 GHz)

Cable connectors ..... -55 dB

Uncabled receptacles and adapters ..... N/A

\*\* All gold plated parts include a .00005" min. nickel underplate barrier layer.

Avoid user injury due to misapplication. See safety advisory definitions inside front cover.

**RF High Potential Withstanding Voltage:** (Vrms minimum, tested at

4 and 7 MHz)†

Connectors for RG-178 ..... 500

Connectors for RG-316 ..... 700

Uncabled receptacles and adapters ..... 600

### MECHANICAL RATINGS

**Engagement Design:** MIL-C-39012, Series SMC

**Engagement/Disengagement Force:** 16 inch-ounce maximum torque

**Mating Torque:** 35 to 50 inch-ounce

**Coupling Proof Torque:** 100 inch-ounce minimum

**Coupling Nut Retention:** 35 pounds minimum

**Contact Retention:** 4 lbs. minimum axial force (captivated contacts)

1 inch-ounce minimum torque (uncabled receptacles)

Cable Retention: ..... Axial Force\* ..... Torque

(pounds) ..... (in-oz)

Connectors for RG-178 ..... 10 ..... N/A

Connectors for RG-316 ..... 20 ..... N/A

Connectors for .086 semi-rigid ..... 30 ..... 16

\* or cable breaking strength whichever is less

**Durability:** 500 cycles minimum

**ENVIRONMENTAL RATINGS** (Meets or exceed the applicable paragraph of

MIL-C-39012

**Temperature Range:** - 65°C to + 165°C

**Thermal Shock:** MIL-STD-202, Method 107, Condition B

**Corrosion:** MIL-STD-202, Method 101, Condition B

**Shock:** MIL-STD-210, Method 213, Condition C

**Vibration:** MIL-STD-202, Method 204, Condition D

### MATERIAL SPECIFICATIONS

**Bodies:** Brass per QQ-B-626, gold plated\*\* per MIL-G-45204 .00001" min or

nickel plated per QQ-N-290

**Contacts:** Male - brass per QQ-B-626, gold plated per MIL-G-45204

.00003" min.

Female - beryllium copper per QQ-C-530, gold plated per MIL-G-45204

.00003" min.

**Nut Retention Spring:** Beryllium copper per QQ-C-533, unplated

**Insulators:** PTFE fluorocarbon per ASTM D 1710 and ASTM D 1457

**Expansion Caps:** Brass per QQ-B-613, gold plated per MIL-G-45204 .00001"

min. or nickel plated per QQ-N-290

**Crimp Sleeves:** Copper per WW-T-799, gold plated per MIL-G-45204 .00001"

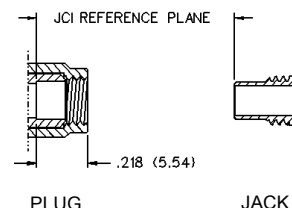
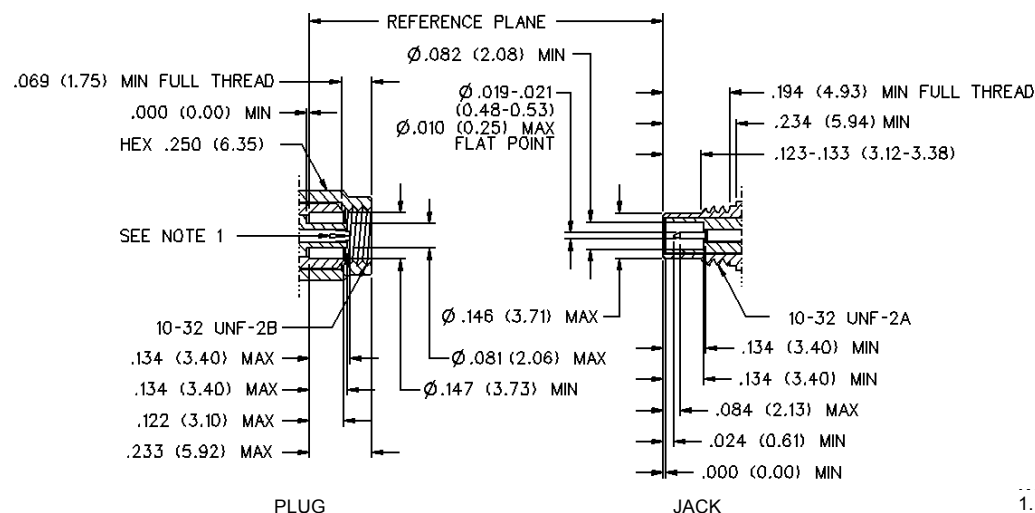
min. or nickel plated per QQ-N-290

**Mounting Hardware:** Brass (nuts) per QQ-B-626 or phosphor bronze

(lockwashers) per QQ-B-750, gold plated per MIL-G-45204 .00001" min. or

nickel plated per QQ-N-290

### MATING ENGAGEMENT FOR SMC SERIES PER MIL-C-39012



### NOTES

1. Inside of contact to meet VSWR, mating characteristics and connector durability when mated with a dia .019/.021 (0.48/0.53) male contact.

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- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
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- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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