









SV Microwave is a leading qualified source for MIL-PRF-39030 Terminations including:

MIL-DTL-39030/3 MIL-DTL-39030/5 MIL-DTL-39030/7 MIL-DTL-39030/20 MIL-DTL-39030/21

39030

ations

SMA Terminations TNC Terminations BNC Terminations Stripline Terminations (Low Power) Stripline Terminations (Medium Power)

### MIL-DTL-39030/3 SMA Terminations

SV Microwave offers military SMA terminations that are 39030 approved. QPL-39030 parts are designed and made under DSCC qualifications in order to resist harsh environments within military applications.

SMA terminations operate under low power and frequency rance up to 19 GHz. These terminations are used in military applications due to their high performance, compact size, and outstanding mechanical durability. Built in accordance with MIL-PRF-39030, SMA terminations can be mated with all connectors that meet these spec mating diameters regardless of manufacturer.

## **Features & Benefits**

- Broadband performance up to 19 GHz
- Nominal impedance up to 95 Ohms
- Terminations in accordance with MIL-DTL-39030

#### **Applications**

- Military Systems
- Test and Instrumentation
- Base Stations
- Telecom

To more easily illustrate the ordering procedure for SV Microwave QPL Attenuators, part number **M39030/3-08S** is shown below.

|   | M39030 | /3 | -08 | S or N |
|---|--------|----|-----|--------|
| Military designator                                 |        |    |     |        |
| <b>Connector interface ser</b><br>SMA               | ies    |    |     |        |
| Dash number designation<br>DC to 18.0 GHz female in | -      |    |     |        |
| <b>S</b> = Screened                                 |        |    |     |        |
| N = Non-Screened —                                  |        |    |     |        |

## MIL-DTL-39030/3 SMA Dash numbers and characteristics

| Dash              | Operating          | VSWR              | Power handling<br>capability (max)Nominal<br>characteristic |                 | G                   | Bead | Lock  | <b>D</b> ' · 1 |            |
|-------------------|--------------------|-------------------|---|-----------------|---------------------|------|-------|----------------|------------|
| number<br>N and S | frequency<br>(GHz) | (max)             | Average<br>(watts)  | Peak<br>(watts) | impedance<br>(ohms) | Sex  | chain | wire<br>holes  | Finish     |
| 01, 16            | DC to 18           | (1.05 +.010f):1   | .5  | 50              | 50                  | М    |       |                | Gold       |
| 02, 17            | DC to 18           | (1.05 +.010f):1   | .5  | 50              | 50                  | М    |       |                | Passivated |
| 03, 18            | DC to 18           | (1.05 +.010f):1   | .5  | 50              | 50                  | М    | ✓     |                | Gold       |
| 04, 19            | DC to 18           | (1.05 +.010f):1   | .5  | 50              | 50                  | М    | ✓     |                | Passivated |
| 05                | DC to 18           | (1.05 +.010f):1   | .5  | 50              | 50                  | F    |       |                | Gold       |
| 06                | DC to 18           | (1.05 +.010f):1   | .5  | 50              | 50                  | F    |       |                | Passivated |
| 07                | DC to 18           | (1.05 +.010f):1   | .5  | 50              | 50                  | F    | ~     |                | Gold       |
| 08                | DC to 18           | (1.05 +.010f):1   | .5  | 50              | 50                  | F    | ✓     |                | Passivated |
| 09, 20            | DC to 10           | 1.10:1            | 1.0   | 100             | 50                  | М    |       | ✓              | Gold       |
| 10, 21            | DC to 10           | 2.10:1            | 2.0   | 200             | 95                  | М    |       | ✓              | Gold       |
| 11, 22            | DC to 18           | 1.15:1            | 1.0   | 100             | 50                  | М    |       |                | Gold       |
| 12, 23            | 2 to 19            | 1.30:1            | 1.0   | 100             | 50                  | М    |       | ✓              | Gold       |
| 13, 24            | 2 to 19            | 1.30:1            | .5  | 50              | 50                  | М    | ✓     | ~              | Gold       |
| 14, 25            | 2 to 19            | 1.30:1            | 1.0   | 100             | 75                  | М    |       | ~              | Gold       |
| 15, 26            | 4.4 to 5.0         | (1.025 +.005f ):1 | .5  | 50              | 50                  | М    |       |                | Gold       |

# **Specifications**

#### **Material**

Body and connector

Contact pin and socket Bead chain and lug

Corrosion-resistant steel per SAE-AMS-QQ-S-763 or ASTM A484/A484M and ASTM A582 Beryllium copper per ASTM B194, ASTM B196, or ASTM B197 Corrosion-resistant steel or plastic

#### Finish

Body and connector

Gold plated per ASTM B488, type 3, grade C, class 1.27 or Passivated per ASTM A967 or SAE-AMS-QQ-P-35

Contact pin and socket







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### MIL-DTL-39030/5 TNC Terminations

SV Microwave manufactures TNC terminations in accordance with MIL-DTL-39030. Military qualified TNC terminations are rated up to 5 watts average power, constant impedance of 75 Ohms and operate from 0.3 to 12.4 GHz. TNC terminations feature a threaded coupling that offers extra mating stability.

### **Features & Benefits**

- Frequency range .03 to 12.4 GHz
- Nominal impedance 50 and 75 Ohms
- Terminations in accordance with MIL-DTL-39030

## **Applications**

Antennas

• Components

• Cellular

Networks

- Mil-Aero
- Telecom

Instrumentation

Cable Assembly

• Base Stations

Radar

To more easily illustrate the ordering procedure for SV Microwave QPL Attenuators, part number M39030/5-03N is shown below.

|                                 | M39030            | /5       | -03 | S or N |
|---------------------------------|-------------------|----------|-----|--------|
|                                 |                   |          |     |        |
| Military designator             |                   |          |     |        |
| Termination                     |                   |          |     |        |
| Connector interface series      |                   |          |     |        |
| Dash number designation on sp   | ecification sheet |          |     |        |
| DC to 10.0 GHz with average pow |                   | ad chain |     |        |
| <b>S</b> = Screened             |                   |          |     |        |
| N = Non-Screened                |                   |          |     |        |

## **MIL-DTL-39030/5 TNC Dash numbers and characteristics**

| Dash<br>number | Operating   | Operating<br>frequency VSWR                             |                           | andling<br>y (max) | Nominal characteristics | Sex    | Bead  |
|----------------|-------------|---|---------------------------|--------------------|-------------------------|--------|-------|
| N and S        | (GHz)       | $(\max)$  | AveragePeak(watts)(watts) |                    | Impedance<br>(ohms)     | Sex    | chain |
| 01             | DC to 10.0  | 1.40:1  | 5.0                       | 3.5K               | 50                      | Male   |       |
| 02             | .06 to .08  | 1.12:1  | .5                        | .6K                | 75                      | Male   |       |
| 03             | DC to 10.0  | 1.15:1  | 2.0                       | 2.5K               | 50                      | Male   | ✓     |
| 04             | DC to 10.0  | 1.05:1<br>(DC to 2.4 GHz)<br>1.20:1<br>(2.4 to10.0 GHz) | 5.0                       | 3.5K               | 50                      | Male   |       |
| 05             | DC to 11.0  | 1.10:1  | 3.0                       | 1K                 | 51                      | Male   | ✓     |
| 06             | .03 to 12.4 | 1.15:1  | 1.0                       | 1.2K               | 50                      | Male   |       |
| 07             | .03 to 12.4 | 1.15:1  | 1.0                       | 1.2K               | 50                      | Female |       |

## **Specifications**

#### **Material**

Body and connector

Contact pin and socket

Corrosion-resistant steel per SAE-AMS-QQ-S-763 or ASTM A484/A484M and ASTM A582 Beryllium copper per ASTM B194, ASTM B196, or ASTM B197/B197M Corrosion-resistant steel or plastic

#### Finish

Body and connector

Bead chain and lug

Contact pin and socket

Gold plated per ASTM B488, type 3 class 1.27 or Nickel plated per with SAE-AMS-QQ-N-290, class 1 or Passivated per ASTM-A967 or SAE-AMS2700 Gold plated ASTM B488, type II, code C, class 1.27 Nickel per SAE-AMS-QQ-N-290, class 1



## MIL-DTL-39030/7 BNC Terminations

SV Microwave is the only qualified source for terminations in accordance with MIL-DTL-39030/7. Our military qualified BNC terminations are lightweight and designed to operate at DC to 2.5 GHz with nominal impedance of 50 - 600 Ohm. BNC terminations feature a bayonet coupling mechanism for quick mating and unmating. These terminations can accomodate a large variety of RG type and industry standard cables.

### **Features & Benefits**

- Quick mating/unmating bayonet coupling mechanism
- Durable and light weight
- 50 600 Ohm Nominal Impedance

## Applications

- Military Systems
- Radio Communications

- Telecom
- Medical equipment

Antennas

Test and Instrumentation

Base Stations

To more easily illustrate the ordering procedure for SV Microwave QPL Attenuators, part number **M39030/7-04N** is shown below.

|  | M39030 | /7        | -04 | S | or | Ν |
|--|--------|-----------|-----|---|----|---|
| Military designator  |        |           |     |   |    |   |
| Termination Connector interface series BNC                                 |        |           |     |   |    |   |
| <b>Dash number designation on spe</b><br>DC to .25 GHz with nom. impedance |        | ead chain |     |   |    |   |
| S = Screened   |        |           |     |   |    |   |
| N = Non-Screened   |        |           |     |   |    |   |

# **MIL-DTL-39030/7 BNC Dash numbers and characteristics**

| Dash<br>number | Operating<br>frequency<br>(GHz) | VSWR<br>(max) | Power ha<br>capability<br>Average<br>(watts) | 0    | Nominal<br>characteristic<br>impedance<br>(ohms) | Sex    | Bead<br>chain |
|----------------|---------------------------------|---------------|--|------|--|--------|---------------|
| 01             | DC to .25                       | 1.10:1        | .5   | 1.0K | 75   | Male   | ✓             |
| 02             | DC to .25                       | 1.10:1        | .5   | 1.0K | 93   | Male   | ✓             |
| 03             | DC to .25                       | 1.10:1        | .5   | 1.0K | 100  | Male   | ✓             |
| 04             | DC to .25                       | 1.10:1        | .5   | 1.0K | 600  | Male   | ✓             |
| 05             | DC to 2.5                       | 1.15:1        | 2.0  | 1.0K | 50   | Male   |               |
| 06             | DC to 2.5                       | 1.15:1        | 2.0  | 1.0K | 50   | Female |               |

# **Specifications**

and socket

| Material                     |  |
|------------------------------|--|
| Body and connector           | Corrosion-resistant steel per SAE-AMS-QQ-S-763 (dash numbers 01 thru 04)<br>Brass per ASTM B121, ASTM B36, ASTM B16, ASTM B16M and ASTM B124<br>(dash numbers 05 and 06) |
| Contact pin and socket       | Beryllium copper per ASTM B196, ASTM B197, or ASTM B194  |
| Bead chain and lug           | Corrosion-resistant steel or plastic   |
| Finish                       |  |
| Body, connector, contact pin | Gold plated per ASTM B488, type 3 class 1.27 or Nickel plated per with   |

SAE-AMS-QQ-N-290, class 1



## **SV Microwave Inspection Capabilities IAW MIL-DTL-39030**

SV Microwave possesses the capability not only to manufacture military connectors that meet the DSCC specifications, but also to test and certify them. With extensive in-house testing capabilities, we ensure that when our products are placed in military environments, they will be able to support crucial airborne and terrestrial applications. In-house testing capabilities include MIL-DTL-39030 screening and material inspection.

SV Microwave offers innovative solutions to satisfy your requirements. We have invested in a talented engineering staff, supported by state-of-the-art, high-frequency 3D RF simulation design software. Our full service laboratories perform comprehensive environmental mechanical and electrical testing. We control virtually all processes with in-house machining, fabrication, assembly and acceptance and qualification testing. Using our in-house testing capabilities eliminates the need for outsourcing environmental test requirements, which results in a lower delivered cost and shorter lead-time.



- Visual and mechanical inspection and weight
- Force to engage/disengage
- Coupling proof torque
- Connector durability
- Solderability
- Terminal strength
- VSWR
- Thermal shock



- Vibration
- Shock
- Moisture resistance
- Salt Spray
- Power dissipation
- Endurance
- Overload
- Pressurization
- Barometric pressure

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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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